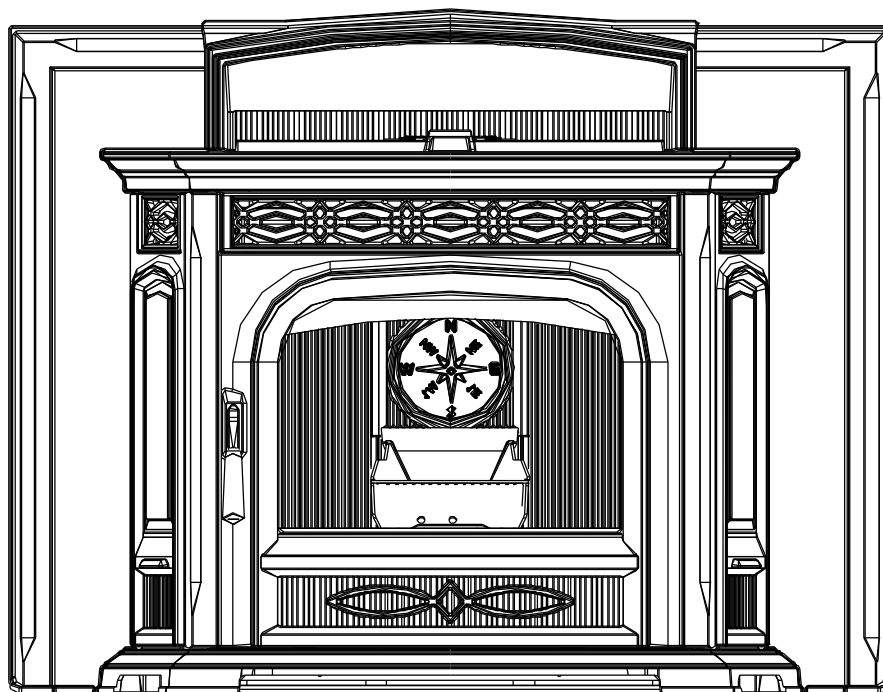


The Harman Accentra Pellet Insert



"Ce manuel est disponible en Français sur demande"

R3

SAFETY NOTICE

PLEASE READ THIS ENTIRE MANUAL BEFORE YOU INSTALL AND USE YOUR NEW ROOM HEATER. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH.

FOR USE IN THE U.S. AND CANADA. SUITABLE FOR INSTALLATION IN MOBILE HOMES

IF THIS HARMAN ACCENTRA PELLET INSERT IS NOT PROPERLY INSTALLED, A HOUSEFIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW INSTALLATION DIRECTIONS.

CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

CONTACT YOUR LOCAL AUTHORITY (SUCH AS MUNICIPAL BUILDING DEPARTMENT, FIRE DEPARTMENT, FIRE PREVENTION BUREAU, ETC.) TO DETERMINE THE NEED FOR A PERMIT.

CETTE GUIDE D'UTILISATION EST DISPONIBLE EN FRANCAIS. CHEZ VOTRE CONCESSIONNAIRE DE HARMAN STOVE COMPANY.

SAVE THESE INSTRUCTIONS.

The Accentra Insert will give you more heat, better temperature control and a level of convenience you won't find in any other pellet insert. The Accentra Insert's many outstanding features make it the best value pellet insert on the market today.

The Accentra's versatile design lets you convert a heat wasting fireplace into an efficient heating source. The Accentra Insert could also be a fireplace hearth for your home that doesn't require a chimney. A special zero clearance fireplace kit converts the Accentra insert into a fireplace that can be placed in virtually any corner or against any wall of your home. You can choose from a variety of mantels and facings that complement your homes décor.

The Accentra's on-board microprocessor constantly senses room temperature and automatically makes adjustments in the feed rate and air supply so you get just the right amount of heat 24 hours a day. This remarkable technology lets you fill the hopper, set the desired temperature and walk away. The Accentra insert lights automatically, brings the room up to the exact temperature and will turn off if no heat is required. No other pellet insert offers such accurate and trouble free temperature control. The control technology gives you the widest heat output range of any insert on the market making it an ideal choice to take the chill off in the spring and fall and to heat your home during the coldest months of the winter.

As with all Harman pellet stoves, maintenance is minimal and cleaning is easy. The Accentra Insert lets you burn close to a ton of pellets before ash removal is needed. And what is even better, the Harman Insert Track System lets you slide the insert out of the fireplace so that it can be cleaned or serviced without having to disconnect the venting system. This innovative design is only available on Harman pellet inserts and lets you reach key components for yearly cleaning.

Tested and Listed by **OMNI-Test Laboratories, Inc.** Beaverton Oregon USA
Report #R2907-135-012-2
Tests réalisés par OMNI-Test Laboratories, Inc. Report #R2907-135-012-2
Testé / Testé la ASTM E1509 and UL-C 1462-M1900

Tests réalisés par EMTECH et BFP Electronique - Novembre 2003
Selon les normes applicables EN 59014-1 Ed.00 + A1 Ed.1 + A2 Ed.02, EN 59014-2 Ed.97 + A1 Ed.01, EN 61000-3-2 Ed.01, EN 61000-3-3 Ed.95 + A1 Ed.01, EN 60335-1

This pellet burning appliance has been tested and listed for use in Manufactured Homes in accordance with OAR 814-23-900 through 814-23-909

"PREVENT HOUSE FIRES"
Install and use only in accordance with manufacturer's installation and operation instructions. Contact local building or fire officials about restrictions and inspection in your area.

WARNING: FOR MANUFACTURED HOMES: Do not install appliance in a sleeping room. An outside combustion air inlet must be provided. The structural integrity of the manufactured home floor, ceiling and walls must be maintained.

Refer to manufacturer's instructions and local codes for precautions required for passing chimney through a combustible wall or ceiling. Inspect and clean exhaust venting system frequently in accordance with manufacturer's instructions.

Use a 3" or 4" diameter type "P" or "PL" venting system, or 4" stainless steel flex as per owner's manual.

Do not connect this unit to a chimney flue servicing another appliance. **FOR USE WITH PELLETTIZED WOOD FUEL ONLY**

Input Rating Max. 5.2; 5kW
Electrical Rating: 240 VAC, 50 Hz, Start 2.0 AMPS, Run 1.1 AMPS
U.S. Electrical Rating: 115 VAC, 60 Hz, Start 4.1 AMPS, Run 2.1 AMPS
Route power cord away from unit.

DANGER: Risk of electrical shock. Disconnect power supply before servicing.
For further instruction refer to owner's manual.
Replace glass only with 5mm ceramic available from your dealer.
Keep viewing and ash removal doors lightly closed during operation.

CE Satisfait aux normes et répond aux prescriptions de la directive CEM 89/33/CEE

HARMAN STOVE COMPANY

Model/Modèle: ACCENTRA INSERT
Room Heater / Pellet Fuel Burning Appliance for use in Mobile Homes. Appareil de chauffage à granulés de bois Utilisable dans des mobile homes.

Serial No. [REDACTED]
N° de série [REDACTED]

PREVENTION DES INCENDIES
Respecter scrupuleusement les instructions du constructeur pour l'installation et les consignes de fonctionnement. Respecter les règles de sécurité en vigueur dans votre région.

AVERTISSEMENT POUR MOBILE HOMES: Ne pas installer dans une chambre. Il est impératif de prévoir une prise d'air extérieur. L'intégrité structurelle du plancher, du plafond et des murs doit être strictement préservée.

Se reporter aux instructions du fabricant et aux réglementations spécifiques locales concernant les précautions requises lors de la traversée d'un mur ou d'un plafond. Contrôler et nettoyer fréquemment tout le système d'évacuation des fumées conformément aux recommandations du constructeur. Réaliser l'inspection des fumées en utilisant des tuyaux «Société générale» de Ø75 mm ou 102 mm ou de la gaine flexible inox double peau comme indiqué dans la notice d'utilisation. Ne pas raccorder ce poêle à un conduit de cheminée déjà utilisé pour un autre appareil.

FONCTIONNE EXCLUSIVEMENT AVEC DES GRANULES DE BOIS.
Consommation maximum: 2,27 kg/h
Caractéristiques électriques: 240 VAC-50 Hz-Intensité au démarrage 2,0A-Intensité fonctionnement normal 1,1A
U.S. Electrical Rating: 115 VAC, 60 Hz, Start 4.1 AMPS, Run 2.1 AMPS
Tenir le cordon d'alimentation à l'écart du poêle.

DANGER: Risque d'électrocution. Débrancher l'appareil avant toute intervention. Pour une information plus complète, se reporter à la notice d'utilisation.
Ne remplacer la vitre qu'avec une vitre céramique 5 mm de même qualité disponible auprès de votre revendeur.
Tenir la porte hermétiquement close durant le fonctionnement.

Please copy your serial number from the label on your stove to the box below.

SERIAL NUMBER

Minimum Clearances To Combustible Material
Non-combustible floor protector must extend 6" (152mm) to the sides and front of unit, measured from the glass face.

Ecartis Minimum de Sécurité:
Le protection de sol doit être constituée de matériau incombustible et s'étendre de 152 mm (6") à l'avant et sur les côtés.

CLEARANCES/ESPACES LIBRES:	A	B	C	D	E
From Insert Body	10"	12"	3/4"	6"	6"
	(254mm)	(305mm)	(19mm)	(152mm)	(152mm) from glass

Manufactured by/Fabrique par: Harman Stove Company 352 Mountain House Road, Halifax, PA 17032

U.S. ENVIRONMENTAL PROTECTION AGENCY
This model is exempt from EPA certification under 40 CFR 60.531 by definition [Wood Heater (A) "Air-to-Fuel Ratio"]

Date of Manufacture / Date de fabrication:

2004	2005	2006	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

SAFETY NOTICE: IF THIS HARMAN STOVE IS NOT PROPERLY INSTALLED. A HOUSE FIRE MAY RESULT. FOR YOUR SAFETY, FOLLOW THE INSTALLATION DIRECTIONS CONTACT LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION REQUIREMENTS IN YOUR AREA.

Harman Stove Company
352 Mountain House Road
Halifax, PA 17032
sales@harmanstoves.com

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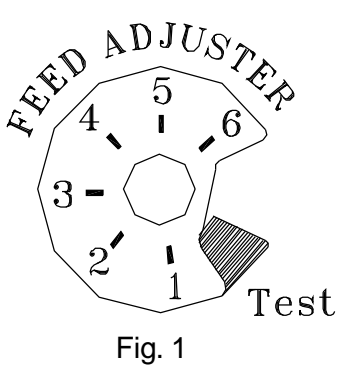


Fig. 1

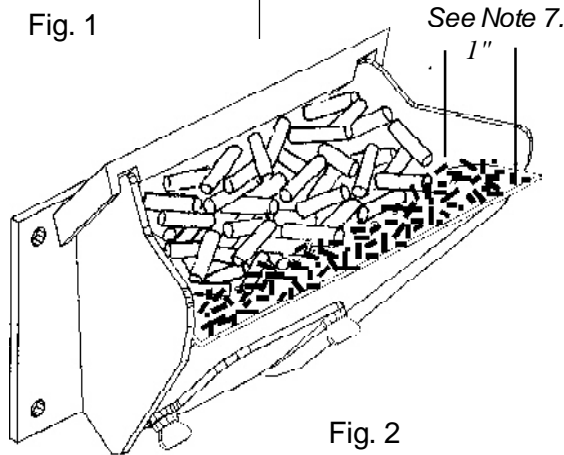


Fig. 2

1. Fines are small pieces or broken pellets (sawdust). Fines do not flow easily and often build up on the hopper funnel bottom angles. These fines can be pushed into the feeder opening and then fill the hopper with pellets. As the system works, they will be burned.

2. The "TEST" cycle will operate the feeder motor for exactly one minute. Turning to "TEST" again and again may purge too much fuel into the burn pot causing excessive smoke on start-up.

3. The firebox low pressure switch will not allow the auger motor or the igniter element to operate if the view door is open.

4. Adjust Feed Rate. If this is your first fire or you are trying different pellets, set the feed adjuster to #4, Fig. 1. This is a conservative number and will probably need to be increased. After you know a feed rate setting that works well, use that setting. Remember, if your feed rate is too high you may waste fuel.

5. This is usually a weekly maintenance procedure. Cleaning the burn pot with the scraper with a small amount of new fuel in the bottom is not a problem. First, scrape the ashes on the front of the burn pot into the ash pan. Then scrape the holed surface downward into the burn pot. When the stove is ignited these scrapings will be pushed out by the feeder.

6. The ash pan can hold the ashes from approximately 1 ton of premium fuel. This means the ashes will only need to be emptied a few times a year.

7. Setting the feed adjuster # for maximum burn: With the unit burning in "AUTO", turn to "Stove Mode" and put the fan on "H". Set the Temperature Dial to #7. Allow the unit to burn for about 30 minutes and check ash on front of burn pot. Fig. 4. If the ash line is larger than 1", turn the feed adjuster from #4 to #5. Allow another 30 minutes of burn time and check again. If, at #6 setting, a 1" or less ash bed is not obtainable, it is not a problem. The 1" ash bed is only a maximum burn rate and at most normal settings the ash bed will be larger.

Starting First Fire

Igniter Switch to "AUTO" (up position)

Make sure the unit is plugged into a 120 VAC, 60 HZ electrical source. The power light should be the only light lit.

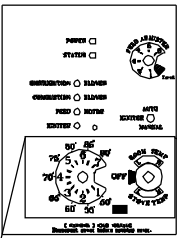
1. Turn Mode Selector to "OFF".
2. Fill hopper with pellets.¹
3. Clean burn pot with scraper, if necessary.⁵
4. If starting after an empty hopper, turn Feed Adjuster to "TEST" (for one 60 second cycle).² This will purge pellets into the auger tube and also allow you to check the motors for operation. **NOTE: The auger motor will not operate with the view door or ash pan door open.**³
5. Turn Feed Adjuster to #4.⁴
6. Flip the Igniter Switch up into the "AUTO" position.
7. Turn the Temperature Dial to desired room temperature.
8. Turn Mode Selector to Room Temperature or Stove Temperature.
9. Fill hopper with pellets and remove ashes as required.⁶
10. Store pellet fuel in a dry area away from all ignition sources and above all limits of the stove's clearance requirements to combustibles. Do not store the fuel where it interferes with the refueling of the stove or emptying of ashes. Do not store any ashes removed from the stove near the fuel or other combustible materials.

WARNING

BURNING GARBAGE, USE OF IMPROPER FUELS, FIRE STARTERS OR ALTERING THE STOVE FOR HIGHER HEAT OUTPUT MAY CAUSE DAMAGE TO THE STOVE AND COULD RESULT IN A HOUSE FIRE. USE ONLY APPROVED FUELS AND OPERATION GUIDELINES.

WARNING

NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR 'FRESHEN UP' A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IN USE.



The Accentra Insert is more than just automatic ignition, it is also automatic temperature control. The automatic system will allow the fire size to be adjusted to match the heating needs and even put the fire out if necessary. If heat is needed after the fire is out, the Accentra Insert will automatically re-ignite and adjust the fire size to match the heating need. The totally automatic room sensor mode is recommended because of its efficiency. The unit can be switched between "AUTO" and "MANUAL" at any time during operation.

Igniter switch to "AUTO" Room Temperature Mode

In "Room Temp Mode" heat output is controlled automatically by the Room Sensing Probe. When the Room Sensing Probe calls for heat, the stove will increase output. When the Room Sensing Probe is getting close to the set temperature, the stove will begin to level off output and keep the fire burning at just the right temperature to maintain that setting.

High output is determined by the feed rate setting. This setting, generally on #4, can be increased if higher burn rates are necessary (Fig. 1). The unit's maximum burn rate should not create less than 1" of ash on the burn pot front edge (See Fig.2). Overfeeding is not a safety concern, but fuel may be wasted if unburned pellets fall into the ash pan.

In "Room Temp Mode" a constant fuel consumption rate is sacrificed for exact room temperature. Therefore, as it gets colder more pellets will be burned automatically.

The distribution blower speed will vary according to the position of the mode selector pointer, and fire size.

Igniter switch to "AUTO" Stove Temperature Mode

This allows for automatic ignition upon start-up only. The unit can then be set at any desired setting. The heat output and fuel consumption will remain constant regardless of room temperature (See Fig 4). The unit's maximum feed rate should not create less than 1" of ash on the burn pot front edge. See Fig 2.

The unit's low burn or maintenance setting is as low as it will go. It will not go out unless it runs out of fuel or is turned off.

Shut-Down Procedure

To kill the fire or stop burning the stove, turn the Mode Selector to "OFF". This will cause the fire to diminish and burn out. When the fire burns out and the stove cools down everything will stop.

If you pull the plug to shut down the stove, all motors will stop. This may cause incomplete combustion and smoke in the firebox. If the load door is opened the smoke may escape.

The best way to shut down the stove is simply let it run out of pellets, then the stove will shut down automatically.

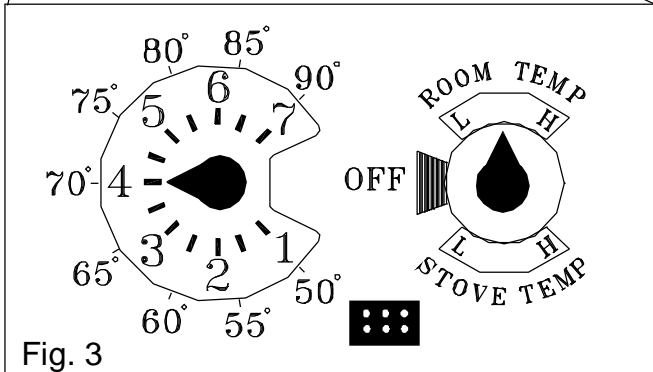
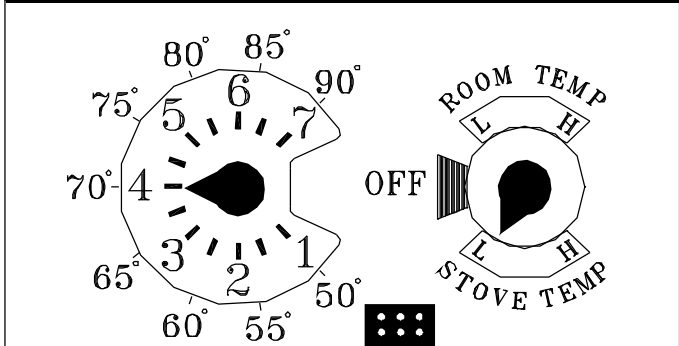


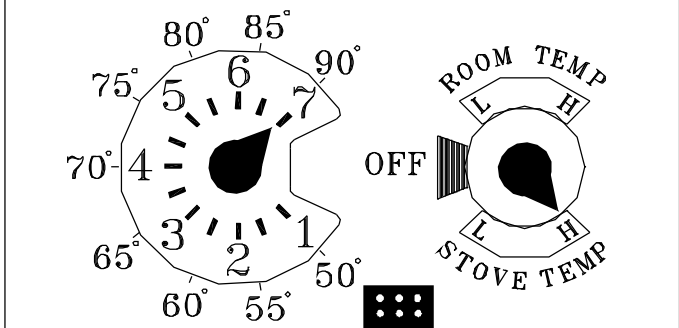
Fig. 3

Room Temperature Mode: This setting will produce a room temperature of 70 degrees with the distribution blower at medium speed.

Stove Temperature Mode



This setting will produce medium heat with the distribution blower on "low".



This setting will produce continuous maximum heat output with the distribution blower at full speed.

Fig. 4

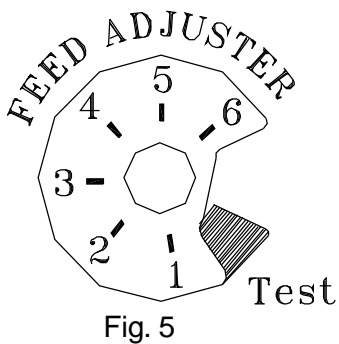


Fig. 5

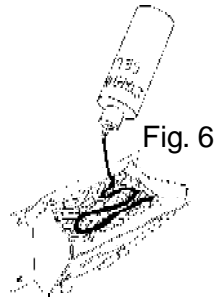


Fig. 6

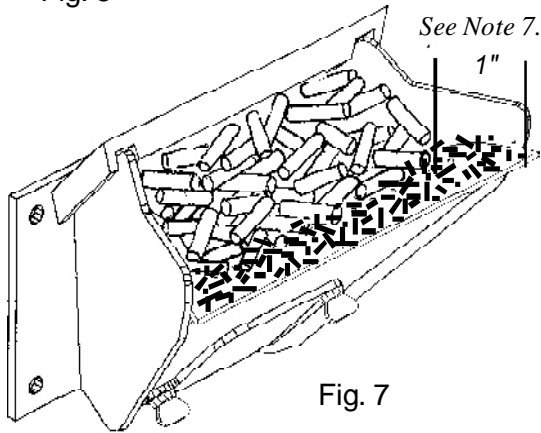


Fig. 7

1. Fines are small pieces of broken pellets (sawdust). Fines do not flow easily and often build up on the hopper funnel bottom angles. These fines can be pushed into the feeder opening and then fill the hopper with pellets. As the system works, they will be burned.

2. The "TEST" cycle will operate the feeder motor for exactly one minute. Turning to "TEST" again and again may purge too much fuel into the burn pot causing excessive smoke on start-up.

3. The firebox low pressure switch will not allow the auger motor or the igniter element to operate if the view door or the ash pan door are open.

4. Adjust Feed Rate. If this is your first fire or you are trying different pellets, set the feed adjuster to #4, Fig. 5. This is a conservative number and will probably need to be increased. After you know a feed rate setting that works well, use that setting. Remember, if your feed rate is too high you may waste fuel.

5. This is usually a weekly maintenance procedure. Cleaning the burn pot with the scraper with a small amount of new fuel in the bottom is not a problem. First, scrape the ashes on the front of the burn pot into the ash pan. Then scrape the holed surface downward into the burn pot. When the stove is ignited these scrapings will be pushed out by the feeder.

6. The ash pan can hold the ashes from approximately 1 ton of premium fuel. This means the ashes will only need to be emptied a few times a year.

7. Setting the feed adjuster # for maximum burn: With the unit burning in "AUTO", turn to "Stove Mode" and put the fan on "H". Set the Temperature Dial to #7. Allow the unit to burn for about 30 minutes and check ash on front of burn pot. Fig. 9. If the ash line is larger than 1", turn the feed adjuster from #4 to #5. Allow another 30 minutes of burn time and check again. If, at #6 setting, a 1" or less ash bed is not obtainable, it is not a problem. The 1" ash bed is only a maximum burn rate and at most normal settings the ash bed will be larger.

Starting First Fire

Igniter Switch to "MANUAL" (down position)

Make sure the unit is plugged into a 120 VAC, 60 HZ electrical source. The power light should be the only light lit.

1. Turn **FEED ADJUSTER** to desired feed rate. No. 4 is good for most pellets.⁴
2. Turn the **MODE SELECTOR** to "OFF" and then to the desired mode. This will reset control and start the combustion motor.
3. Turn the **TEMPERATURE DIAL** to the desired setting.
4. Clean burn pot with scraper if necessary:⁵
5. Fill burn pot with pellets, only level with front edge. (Do Not Over Fill).
6. Add starting gel on top of the pellets. Stir gel into pellets for fast lighting.
7. Light starting gel with a match, and close the door. Operation will begin when the fire reaches the proper temperature.³
8. Fill hopper with pellets and remove ashes as required.^{1, 6}

Notice when using Optional Battery Back-Up:

If a power outage is expected, change the toggle switch to Manual Mode. The Harman 502H Battery Backup is incapable of powering the igniter. If an automatic ignition is attempted while the stove is being powered by the battery back up, it may cause damage to both the stove and the battery backup unit.

Warning

NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID, OR SIMILAR LIQUIDS TO START OR 'FRESHEN UP' A FIRE IN THIS HEATER. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE HEATER WHILE IN USE.

The Accentra Insert is capable of manual operation. This also allows the operator to manually control operation during an emergency (i.e. igniter failure, when using a 502H battery backup, or when using certain generators.)

The unit can be switched between "AUTO" and "MANUAL" at any time during operation.

NOTE: When starting the unit in the "AUTO" mode and switching to "MANUAL", the fire must be large enough to start the distribution blower. The starting of the blower is a signal that the start cycle is completed and the fire will not go out.

Igniter Switch to "MANUAL"
Room Temperature Mode

The fire will have to be lit with starting gel and a match, or started automatically, see "Automatic Operation". Turn to "Manual" position when the fire is established.

The difference between "AUTO" Room Temperature Mode and "Manual" Room Temperature Mode is that the fire will not go out as the room temperature goes above the control board setting. The unit can only go to low burn and will remain there until it runs out of fuel or until more heat is needed and the feed rate increases. Feed rate adjustments and dial settings are the same as "AUTO" settings.

Igniter Switch to "MANUAL"
Stove Temperature Mode

The advantage of this mode is to allow the operator to have a large viewing fire without blowing extra heat into the room.

During operation, with the temperature dial set at #5 or less, the distribution fan will not operate. A #5 on the temperature dial and a #5 on the feed adjuster is approximately 80% output. It is not necessary to operate the distribution blower below this point. Therefore, there can be a higher feed rate (a larger viewing fire) without an excess of hot air blowing into the room.

An example of when to use the Manual Stove Temperature Mode is if you want to watch a large fire and the room is already up to temperature. The Stove Temperature Mode allows you to have a larger fire and a lower sound level, without the distribution blower.

NOTE: During the use of this mode, if you keep increasing the temperature dial setting to increase the fire size, the distribution blower will automatically come on when the ESP Temperature reaches 350° F, or 81% output.

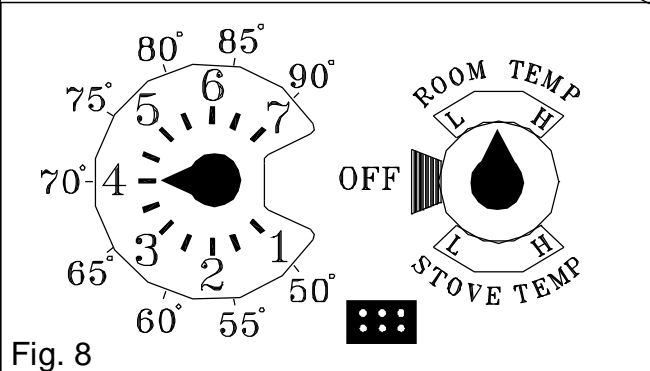
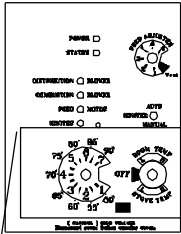
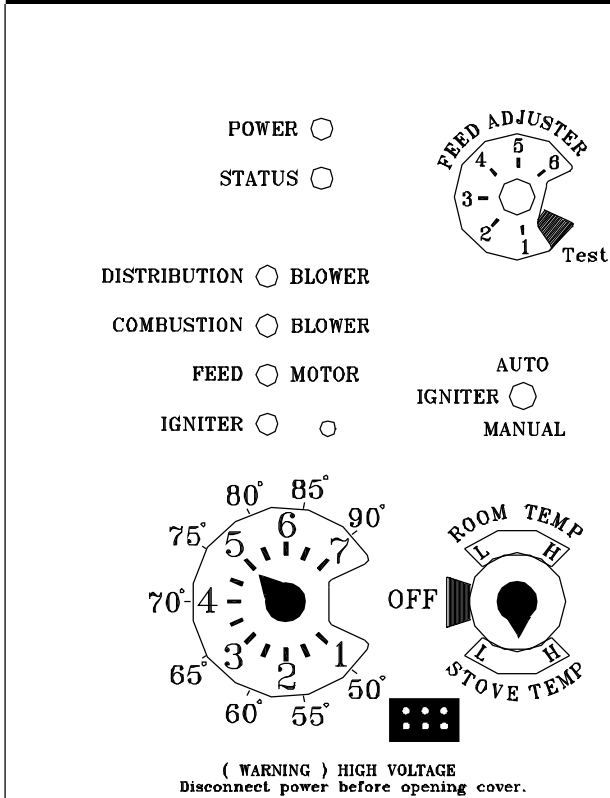


Fig. 8
Room Temperature Mode: This setting will produce a room temperature of 70 degrees with the distribution blower at medium speed.

Manual Stove Temperature Mode



This setting will produce a large viewing fire without a distribution blower operating.

Fig. 9

Power Light
Indicates power to the control.

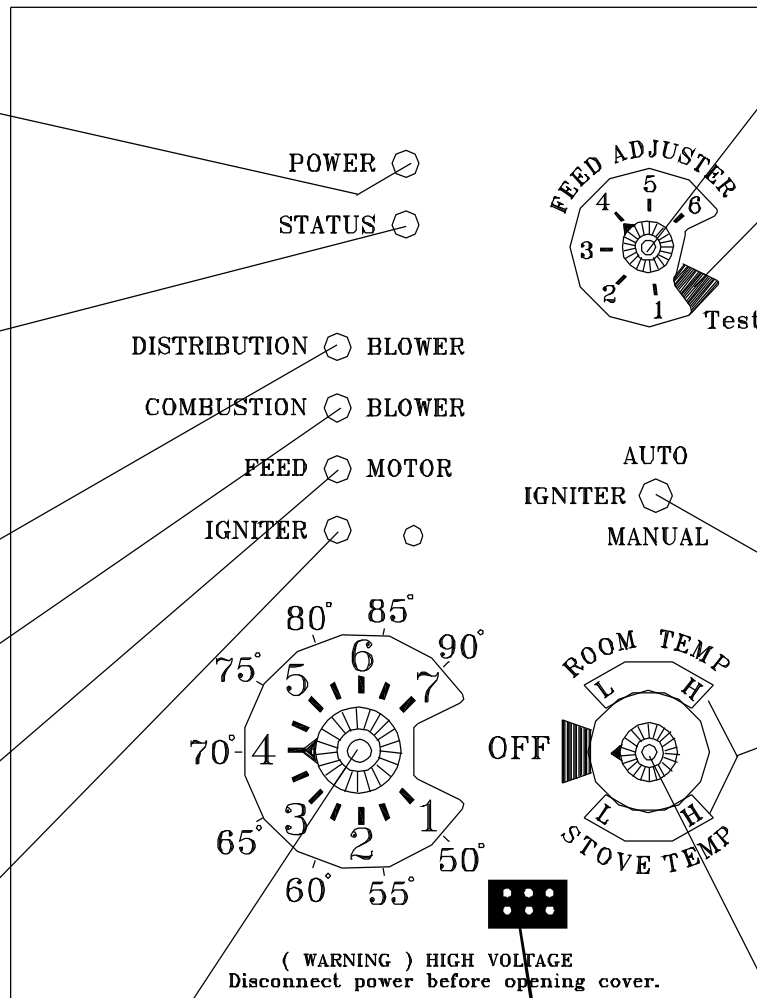
Status Light
Will be lit in either stove or room temp mode when pointer is not within off position band except after normal shut down. Blinks to indicate errors listed below.

Indicates power to distribution blower.

Indicates power to combustion blower

Indicates power to the feed motor.

Indicates igniter is on.



Feed adjuster
Sets the maximum feed rate

Test
Runs all motors at full speed for one minute to check operation. After two minutes the stove will go to minimum burn and the blowers will alternate from high to low every minute to remind you that you are still in "Test Mode".

Igniter switch
Set to appropriate Start-Up mode.

Distribution Blower speed adjustment range. L = low H = high Variable speed anywhere between L and H; although as the stove temp. goes up, so does the L and H scale.

Temp dial
Allows you to adjust the room temperature in Room Temp Mode using the outer scale marked in degrees Fahrenheit. It also allows you to adjust the stove temperature while in Stove Temp Mode using the inner scale marked from 1 to 7.

Dealer Diagnostic Port
For dealer maintenance only. Requires special DDM monitor supplied to Harman Dealers exclusively.

Mode Selector
Allows you to choose between Room Temp Mode, Stove Temp Mode, or OFF. Also allows you to vary the distribution blower speed by turning the knob to the high or low side of each mode.

(WARNING) HIGH VOLTAGE
Disconnect power before opening cover.

Status light error messages:

- 1 Blink:** Indicates control board self diagnostic failure. This requires a manual reset*.
- 3 Blinks:** Indicates ESP (Exhaust Sensing Probe) failure. This requires a manual reset*.
- 4 Blinks:** Can occur only in Room Temp Mode and indicates Room Sensing Probe failed or not installed. If a Room Sensing Probe is then installed, the status light will automatically reset.
NOTE: Unit will not start in "AUTO" with this status error.
- 5 Blinks (In Igniter Auto. Mode Only):** Indicates that the unit has failed to light within the 36 minute start cycle. To reset - Turn Mode Selector to "OFF", then turn to either mode again.)

- 6 Blinks :** Indicates that the control has calculated poor or incomplete combustion occurring for more than 50 minutes.
A six blink status may be set if the stove is allowed to run out of pellets. To reset, turn mode selector to "OFF" then back on to the desired mode. If the unit was not out of pellets, see Troubleshooting section, Page 24, for more details.
- * **Manual reset-** disconnect power cord for a few seconds and reconnect. If error still occurs call your Dealer.

How to Reduce the Weight for Installation

1. Remove the top/lid assembly and side panels.
 - **Note: Removal of the cast hopper lid itself is NOT necessary or recommended.**
 - Note: The hopper lid must be in the "OPEN" position before the top/lid assembly can be lifted off or reinstalled on the stove body.
 - There are (4) 1/4-20 x 1/2" flange headbolts securing the top/lid assembly to the stove body. They can be removed from the underside with a 3/8" socket.

The cast top and lid assembly bolt down bars:

On each side of the stove body, underneath the cast top, are (2) 1/4" flange head bolts. See Fig. 12. These bolts pull the cast top and lid assembly down onto the hopper gasket to seal the hopper. They also allow for a small amount of front to back adjustment for alignment of the top into the wing pockets.

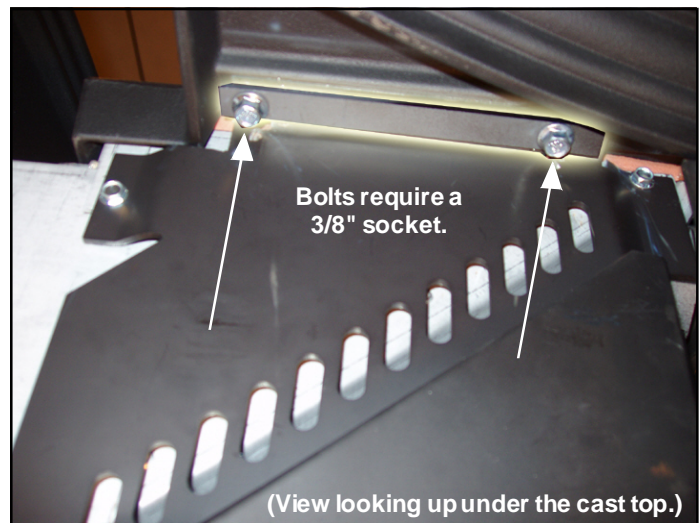


Fig. 12

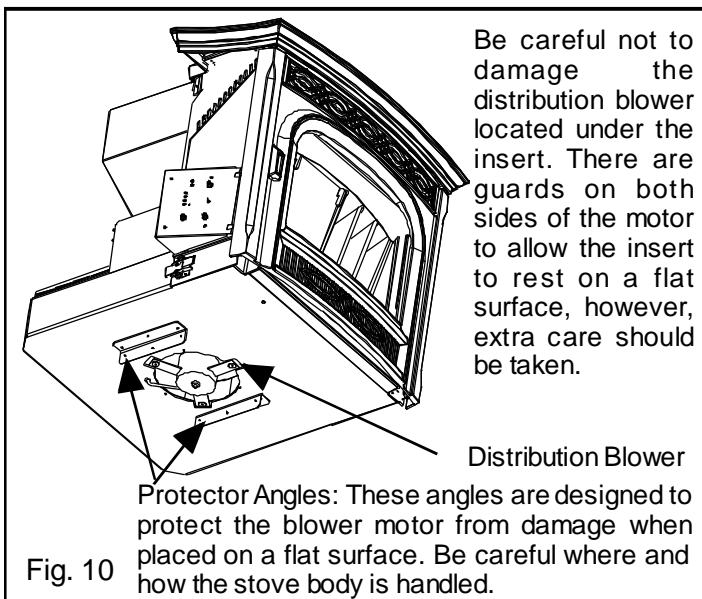
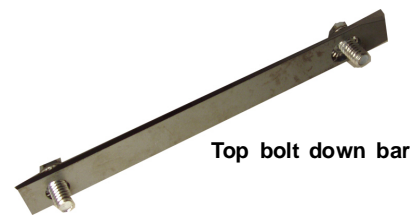


Fig. 10

Remove the cast side panels by lifting them upward off of the hinge pins. See Fig. 13.

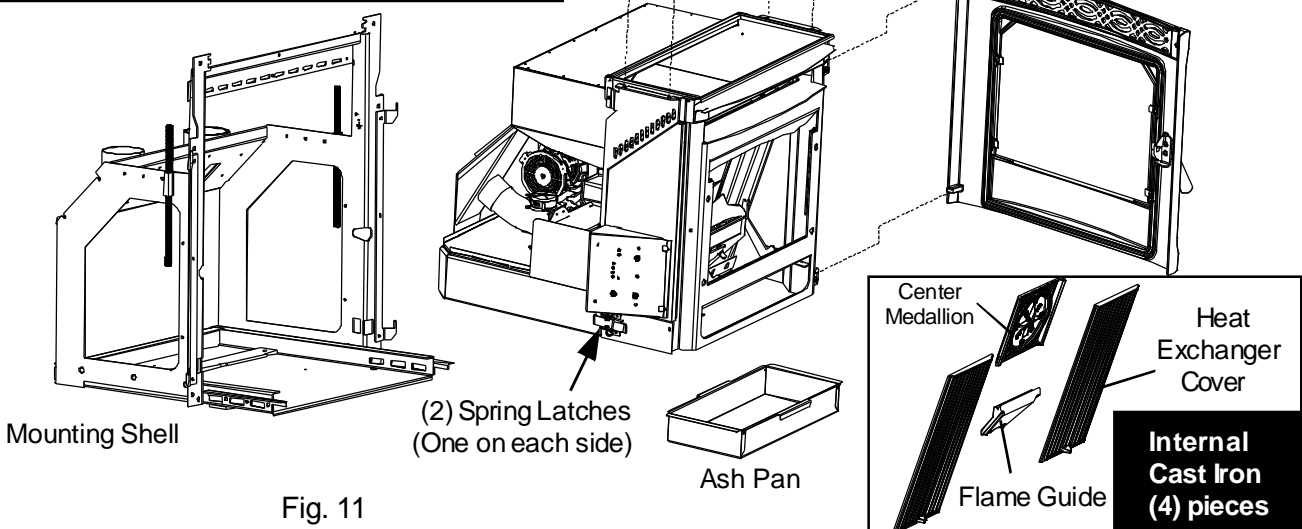


Fig. 11

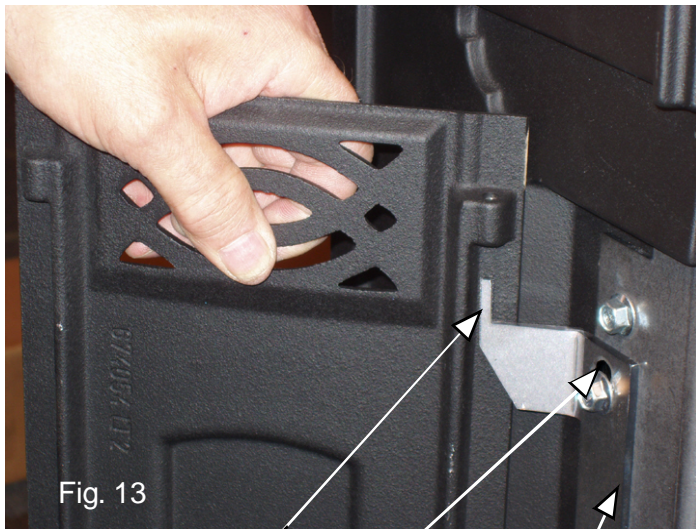


Fig. 13

Lasered hinge pin pivoting point

Cast side panel hinge

Up and down clearance adjustment slots.

How to Reduce the Weight for Installation, cont'd

2. Remove the door by swinging it open approximately 90° and lift it upward until it clears the hinge pins.
3. Remove the ash pan
4. Remove the (4) internal pieces of cast iron. See Fig. 14 and 15.

Removing the Center Medallion

- Lift up on the 2 bottom corners of the medallion until it is higher than the top of the flame guide.
- Pull the bottom edge of the medallion front approximately 1 inch.
- Pull downward on the corners of the medallion until the top is released from the 2 retainers that keep the top aligned when in place.
- Note: The heat exchanger covers will tilt to the front when the center medallion is removed.

Center Medallion

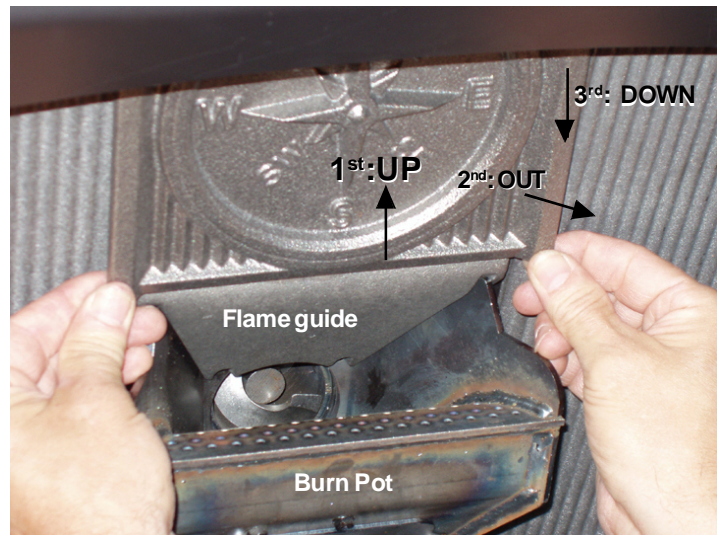


Fig. 14

Removing the Heat Exchanger Covers

- Remove the heat exchanger cover by lifting it upward about 1/2 inch and move the bottom edge front until it sits flat on the firebox bottom.
- Rotate the edge of the heat exchanger closest to the burnpot until it is in front of the burnpot.
- Tip the top of the heat exchanger toward the middle of the opening until it can be lifted up and out.

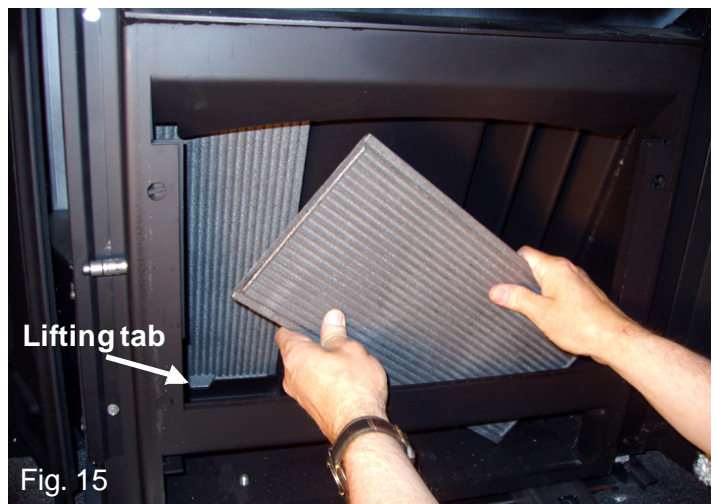


Fig. 15

Beginning Installation

IMPORTANT: The mounting frame/surround assembly and flue piping is the most critical part of the installation and must be done correctly and installed **securely**.

1. Choose the chimney configuration that is best suited for the installation. See venting section.

• Note: If 100% outside air is desired or required, the outside air option will need to be installed on the stove body. (See instructions included with outside air kit (part #1-00-674080.) See Page 20.

2. Make sure the unit will fit into the fireplace opening. See Fig # 17. When installing in smaller fireplaces, test fit the mounting frame into the firebox. Note: The unit overhangs to the rear.

3. Install the 3 piece cast surround set to the sides and top of the mounting frame with the bolts and nuts supplied. The left and right side should be done before the center section is installed. Make sure the bolts are loose. Do not remove the side panel hinges. The left and right side wings should be standing up aligned with the side of the mounting frame and slid inward towards the center. Note: The wings mount on the rear side below the notch and on the front side above the notch. See Fig. 16 & 18. Slide the cast ash lip onto the frame and check to make sure it can go against the roped frame rails and fits into the pockets on the left and right cast sides. See Fig. 19. Install the center section.

4. If the wing extensions are required they should be installed next.

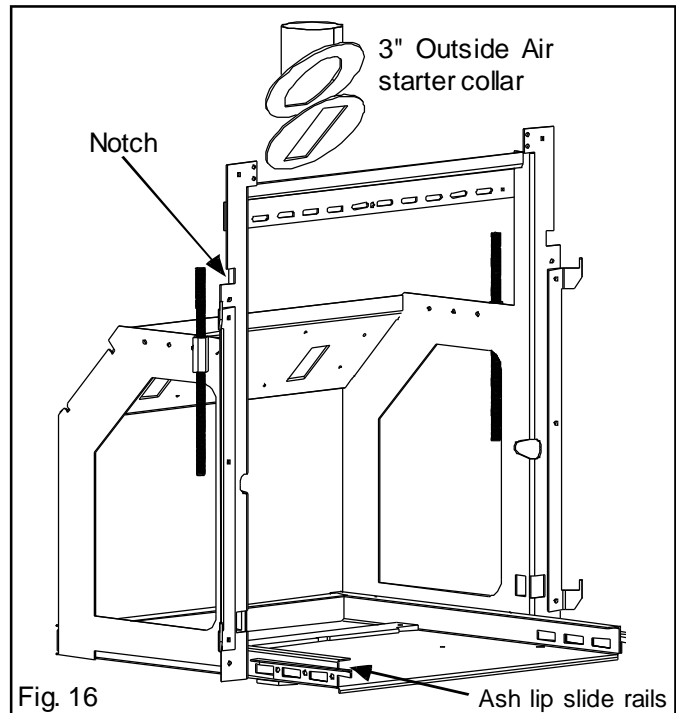


Fig. 16

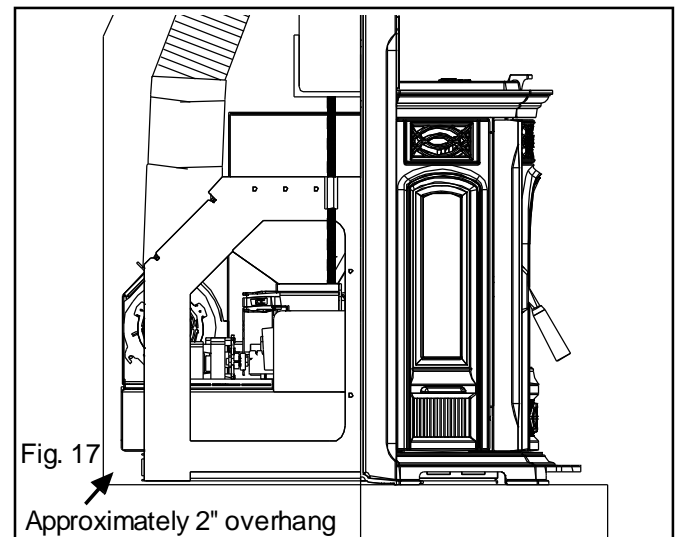


Fig. 17

Approximately 2" overhang

NOTE: The stove body extends through the mounting frame in the rear approximately 2".

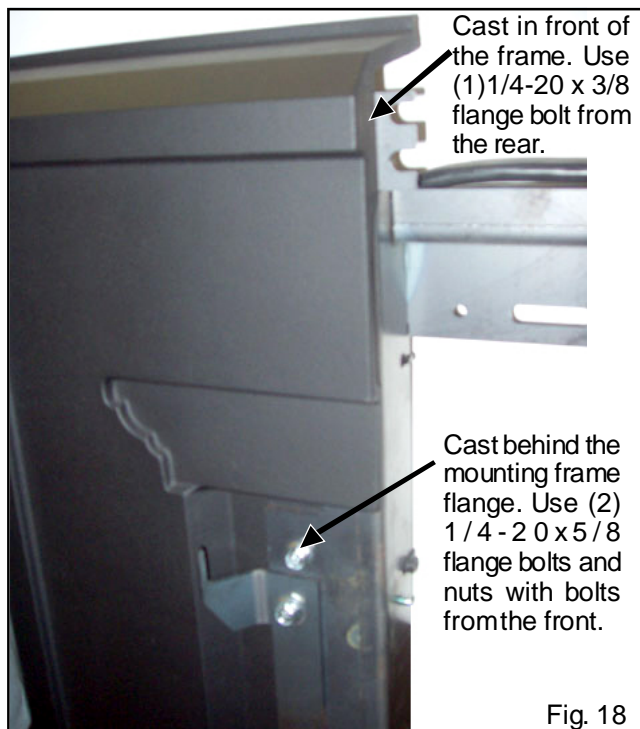


Fig. 18

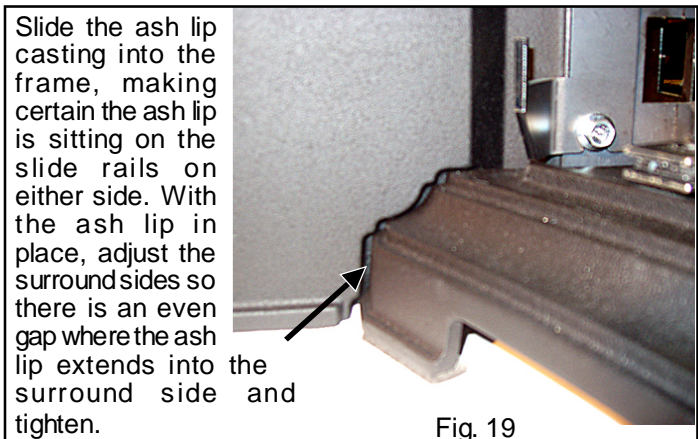


Fig. 19

Optional Wing Extensions

Optional wing extensions are made for fireplace openings which are larger than the cast wing. The 3 piece wing extension is 48" wide by 34" high.

Custom oversized wing extensions can be purchased from Harman for any fireplace openings larger than the standard wing extension area.

These optional wing extensions will have a 1/2 inch return bend as shown in fig. 20. Custom oversized wing extensions with a radius top can be ordered with a radius of your choosing. These radius top wings WILL NOT have a return bend, although they will be made of thicker metal to reduce warpage.

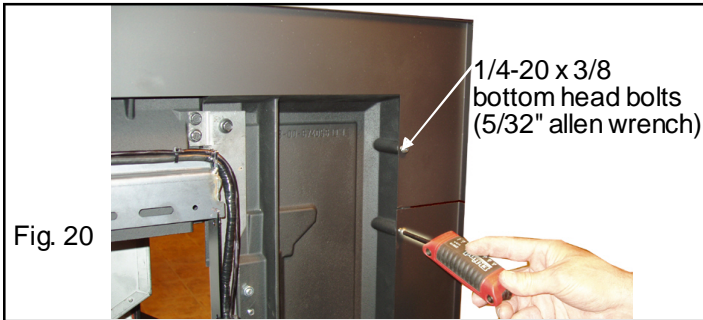


Fig. 20

5. The power cord can be installed exiting the left (standard) or right side of the surround. If a right side cord is desired, follow the instructions below.

Changing the cord exit location from the left side to the right side:

The cord is located on the left side, standard from Harman. (See fig 21.)

To route the cord to the right side:

- Cut the ty-raps looping the cord to the left
- Reroute the cord along the top of the steel angle and down the right side.
- Re-ty-rap (not supplied by Harman) the wire through the notches provided in the mounting frame. Then down the right side rail.
- Do not remove or move the cord retainer, it is made to reach both the right and left sides.

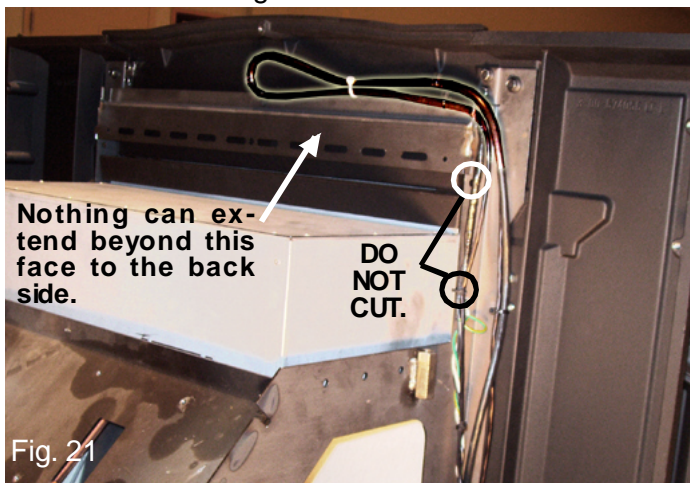


Fig. 21

Connecting the cord retainer to the wing

With the three wing pieces completed, the cord retainer must be bolted to the bottom rear of the wing. Either left exit (shown in fig. 22) or right exit.

At the bottom rear edge of the right and left wing there is a small radius indent for the cord to exit between the wing and the fireplace face.

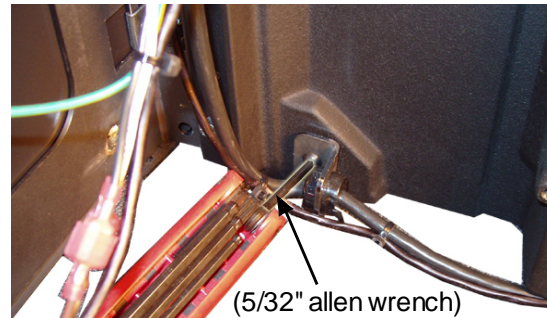


Fig. 22

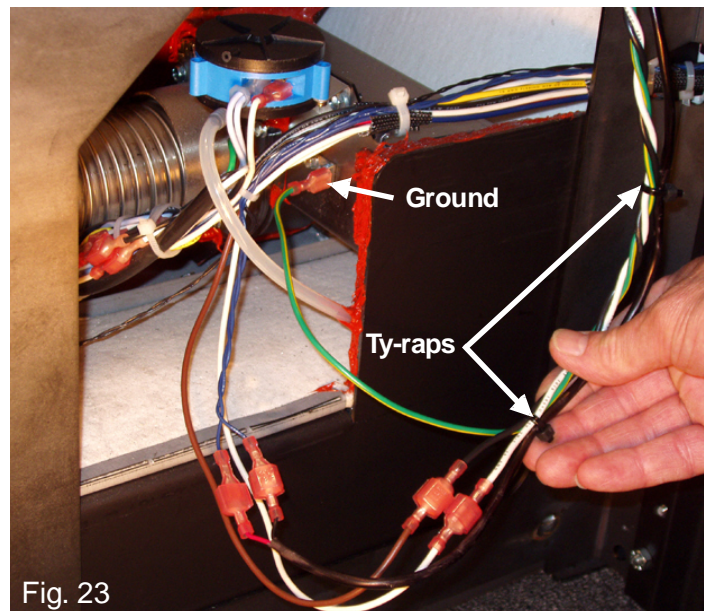


Fig. 23

6. You must now decide whether to install the room sensor as a wall sensor or as a return air sensor. Harman highly recommends that the room sensor be installed. If you are installing the room sensor as a wall sensor, the long black 2 wire cable must be Ty-rapped to the powercord. This wire is long enough to reach the end of the power cord so the installer can reach past the hearth to the location where the extension wire (18/2 thermostat wire, not supplied by Harman) can be spliced to go to the wall location chosen for the room sensor.

7. If the room sensor is used as a return air sensor rather than a room thermostat/sensor, the black cable will not be used. The room sensor itself (gray cable with black and red wires) will be connected to the blue twisted wires from the control board.

Note: The stove body must be able to slide out of the shell to the limit of the power cord wires for cleaning and service. Therefore, if the room sensor is connected as a return air sensor, the wire should be connected long enough to allow this, but not too long that it would get tangled or pinched anywhere.

Notice: The male/female connections between the mounting shell and the stove body should always be maintained. Wirenut or taped splices should never be used.

Connecting the room sensor as a return air sensor

- Insert the sensor end of the wire from the rear of the mounting frame through the hole as shown in fig. 24 .
- Tyrap the sensor end so that the sensing tip is in the middle of the front return air opening. See Fig. 25.
- Tyrap the sensor wire to the inside of the mounting frame up to the cord grounding location. Follow the power wiring to where you make the male/female terminal connection to the twisted blue wires. There are (2) crimp-on connectors in the hardware pack that must be installed on the internal ends of the room sensor wires.

8. Install the (4) 3/8-16 x 1" leveling bolts into the threaded holes in the bottom pan of the mounting shell. The front two leveling bolts may not be necessary, but the back two will need to be used to level the wing so that it is flush with the fireplace face. See Fig. 26.

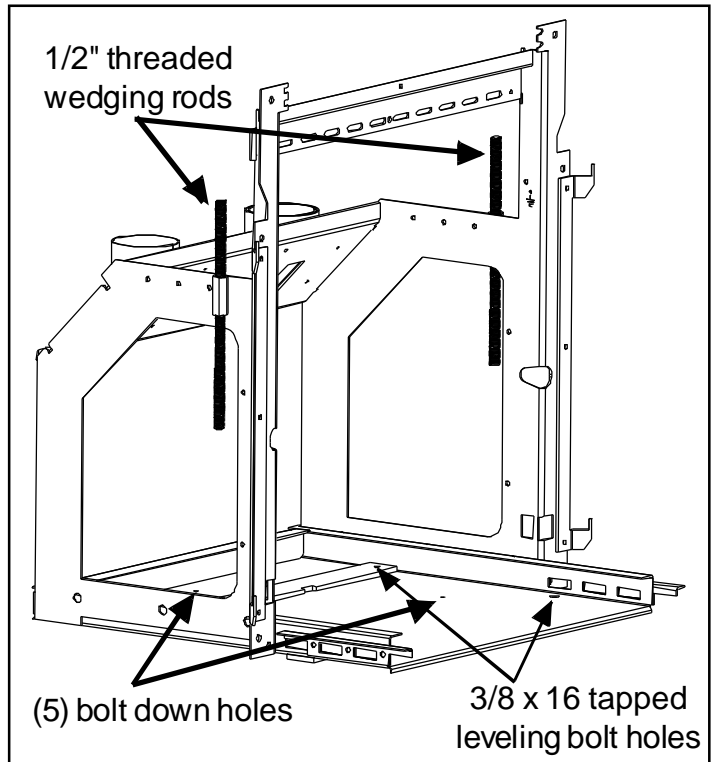


Fig. 26

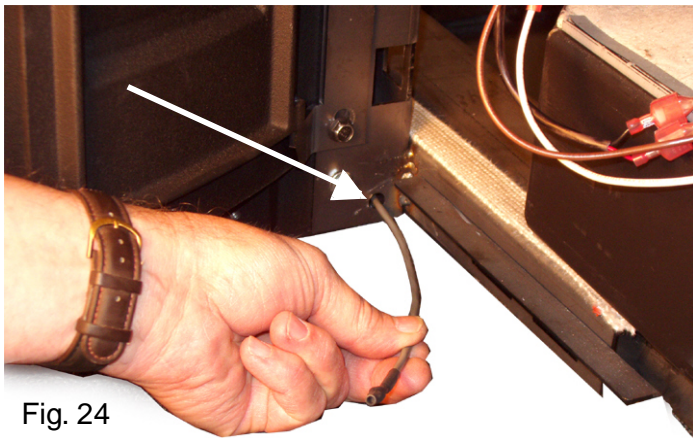


Fig. 24

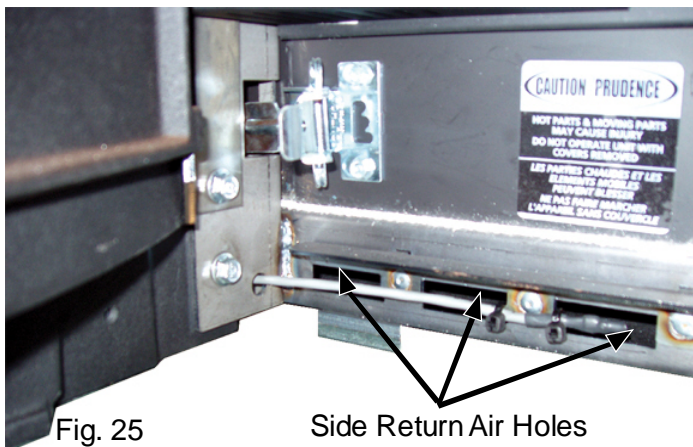
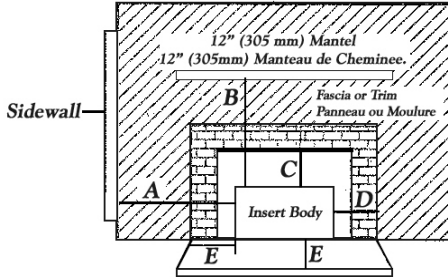


Fig. 25

Side Return Air Holes

9. Install the completed frame/surround assembly into the firebox and level/plumb the wing to the fireplace face using the leveling bolts as jacks.

* Ash protection must be used from hearth opening to 6" in front of door glass and 6" to each side of the stove body to protect any combustibles from hot ashes. A minimum size will be 16.5" deep by 30" wide and be made of a non-combustible material or meet UL approval.



CLEARANCES:

	A	B	C	D	E
From Insert Body	10"	12"	3/4"	6"	6" (from glass)

10. Test fit the cast ash lip (See fig. 25) on the shell frame mounting rails. The ash lip should slide on these side rails without lifting upward off of the rails as the ash lip is slid inward. A small clearance of about 1/16" is an ideal space between the legs of the ash lip and the hearth. This cast ash lip is a decorative part that does not and should not support any weight.

11. Tighten the (2) 1/2" threaded wedging rods up against the lintel of the fireplace opening. It is also recommended to use some form of anchoring screws through the bottom of the shell into the hearth. There are up to 5 holes provided. Note: It is a good idea to check the ash lip again. The frame may have shifted when the final anchoring was completed. See fig. 26.

12. Complete the flue piping, and outside air piping, if used. Make sure the damper area is sealed.

CAUTION: IF THE STAINLESS STEEL FLUE PIPE DOES NOT EXTEND FAR ENOUGH ABOVE THE OLD DAMPER OPENING, MAKE SURE THE FIBERGLASS INSULATION DOES NOT EXTEND UPWARD AND COVER THE PIPE OUTLET.

WARNING DO NOT CONNECT THIS UNIT TO ANY AIR DISTRIBUTION DUCT OR SYSTEM.

13. If a rear exit flue configuration is used, with or without outside air, make sure the flue pipe termination clearances are followed as per the manufacturers recommendations.

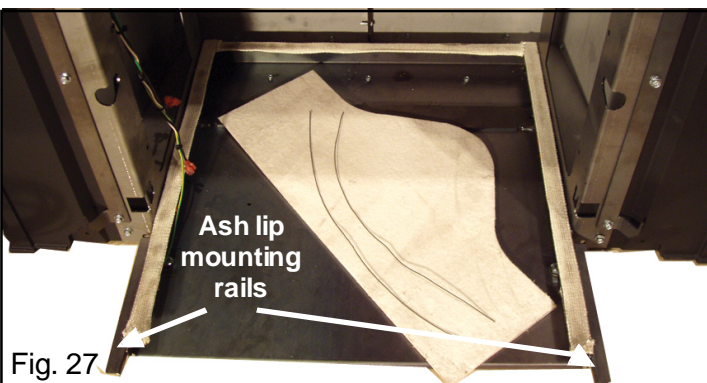


Fig. 27
Pre-cut ceramic insulation and (2) pieces of tie wire.



Fig. 28

Flue Pipe Stub Assembly

There are three different diameter flue pipe stub assemblies.

1. The unit comes standard with the largest for use with 4" stainless steel flex pipe.
2. Part #1-10-082745 for use with 4" PL vent starter pipe.
3. Part # 1-10-674039 for use with 3" PL vent starter pipe and also for use with 3" aluminum flex duct for outside air connections.

The flue stub assembly base is a round plate which allows it to swivel to allow the flue pipe to exit the mounting frame in other positions rather than straight up. See fig. 28.

14. Install the flue pipe insulation wrap. See Fig. 27. This ceramic insulation is pre-cut to form around the flue pipe stub, to reduce heat transfer into the area around the rear of the hopper and motor area. **This insulation must be installed in all configurations, even if a rear discharge is used.** See Fig. 29.

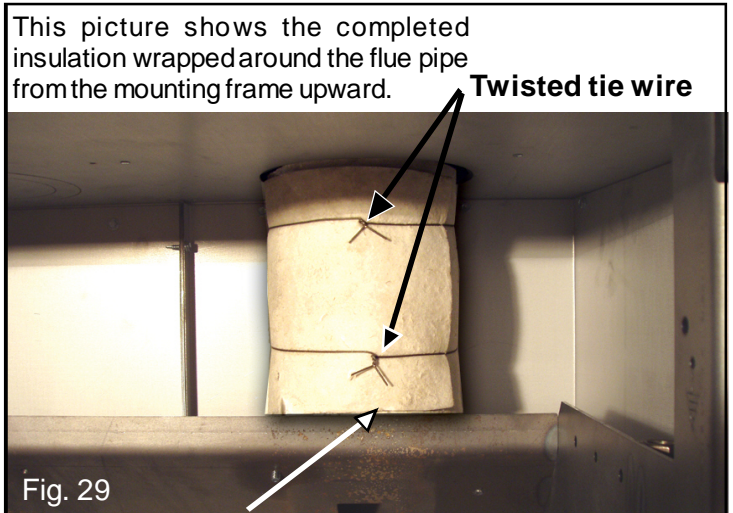


Fig. 29

With larger flue pipes this bottom edge of the insulation will need to be trimmed to complete the wrap.

15. Install the cast side panels by sliding them down over the lasered hinge pin. Note: Check for rotational swing, but finish with them in the open position. The cast side panels may need adjustment after the stove body is latched into place and the front door is closed.

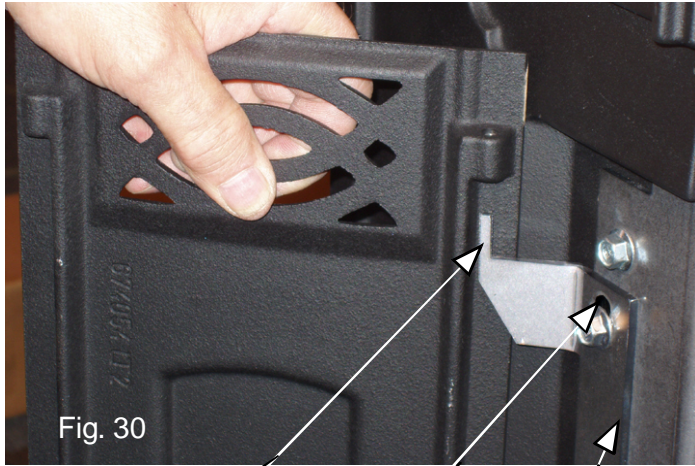
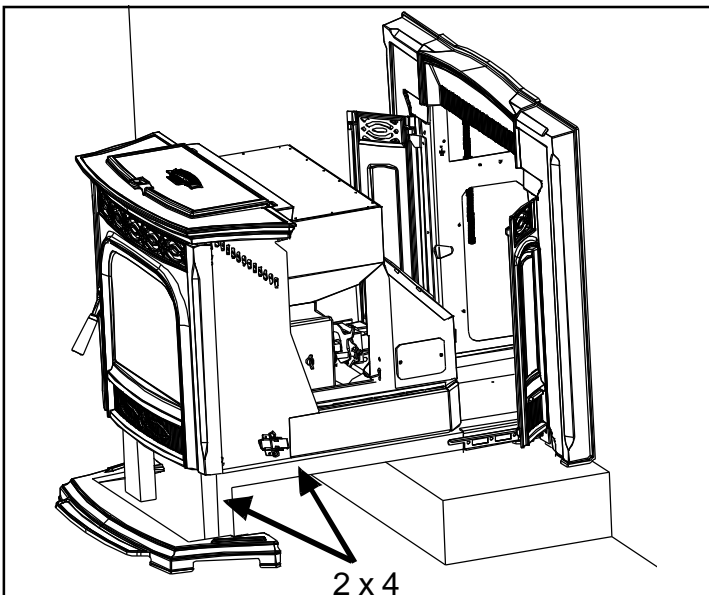


Fig. 30

Lasered hinge pin pivoting point
Up and down clearance adjustment slots. Cast side panel hinge

16. Place the stove body on the mounting shell gasketed rails and insert the body into the opening far enough that it can't tip out. Note: A service rail kit (Part #1-00-08007), or a pair of 2 x 4's supported in front of the hearth will make this job easier. See Fig. 31.

17. Complete the following electrical connections (caution: Disconnect the power cord.) There are 5 connections that must be completed. See Fig. 33 & 34.



2 x 4
Fig.31

Connecting the ground from the wing to the stove body

- The green wire with a female terminal is the stove body ground.
- On the combustion air inlet box there is a male terminal ground.
- **If service is performed on this stove, this ground connection must be the first one on and the last one off.**

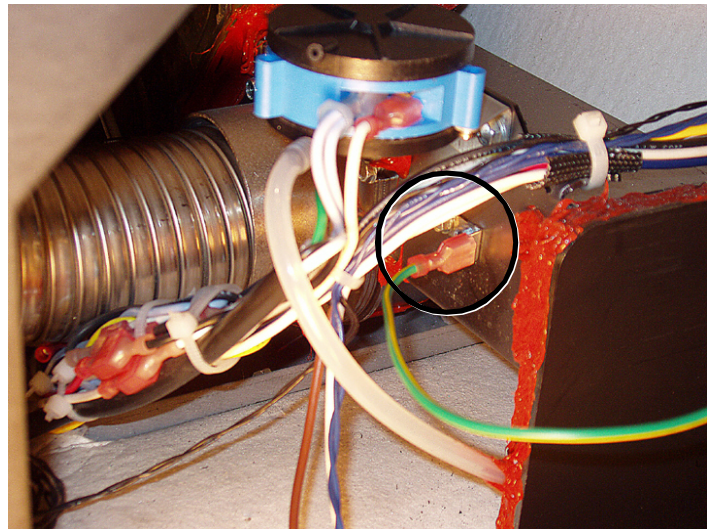


Fig. 32

Connecting the power cord

The white from the mounting frame connects to the white of the insert body. The black from the mounting frame connects to the brown of the insert body.

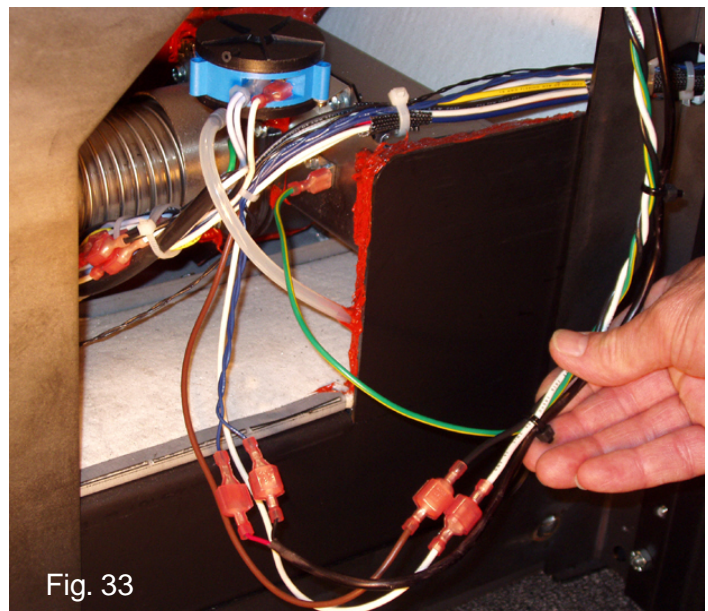


Fig. 33

Connecting the Room Sensor

Connecting the room sensor to the blue twisted wires from the control board:

- (2) 3/16 inch male terminals are provided for the ends of the room sensor wires.
- They will mate with the female terminals on the blue twisted wires.
- These connections are "not polarity specific."

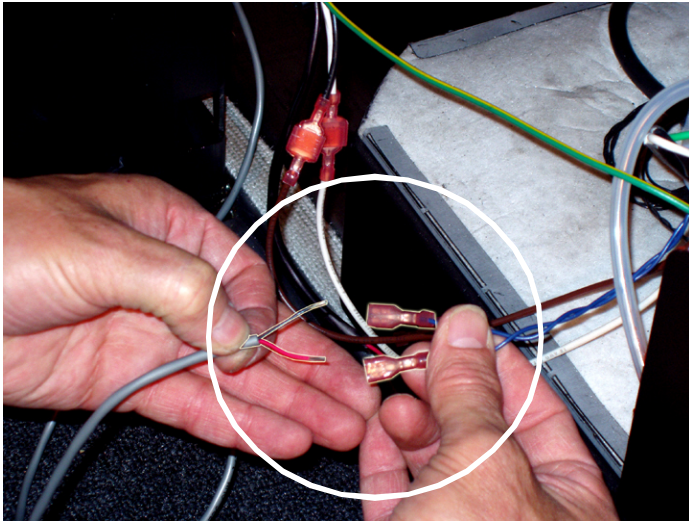


Fig. 34

18. Install the front door. Check the latch and gasketing.

Hopper Seal

Inspect the silicone sponge hopper to top seal gasket. Look for tears or areas where the gasket may not seal properly to the bottom of the cast top. This only needs to be done when the top is removed. This is NOT necessary if the cast top is not removed. (Not part of any monthly, semi-annual or annual maintenance.)



Fig. 35

19. Inspect the silicone sponge gasket on the top edge of the hopper.

- If it is okay, put the cast top/hopper lid assembly (see Fig. 35) into place over the hopper.
- Make sure the hopper lid is open to install unit, then close it to keep from getting pinched in case the lid falls unexpectedly.
- Insert the (4) 1/4-20 x 1/2 flange head bolts into the mounting hole but do not tighten them. See page 8, fig. 12.

20. "Test" the unit with the stove body pulled out. This will allow you to see the motors in operation.

- Turn the control to the "OFF" position.
 - Plug the unit into a 120 VAC 60 hz outlet.
 - Turn the control to "test". All of the motors should operate at full voltage for 60 seconds.
- Note: The door must be closed for the feed motor to operate.
- With the "Test" completed, unplug the unit.

21. Inspect the flue docking gasket. See Fig. 36.

Docking Gasket

Everytime the unit is pulled out of the mounting frame, the orange high temperature docking gasket should be inspected. Check for tears or signs that the gasket is not sealing properly.

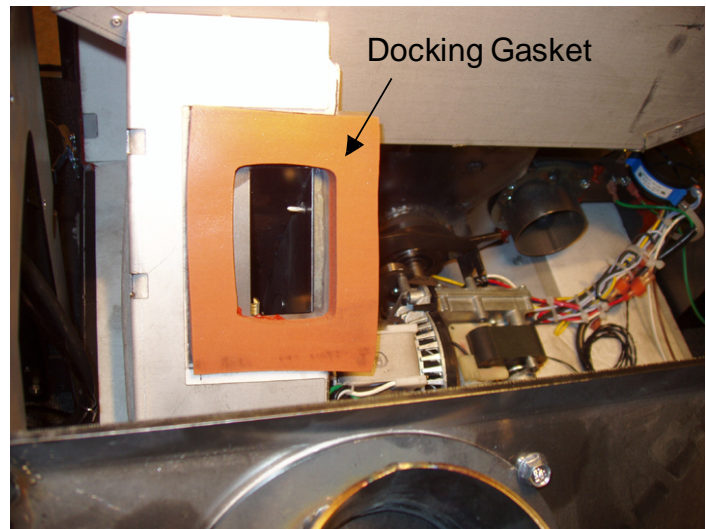


Fig. 36

22. Slide the stove body into the mounting frame.
- Note: The two spring latches on the bottom right and left side of the body must be in the proper position to enter the latch holes. (See fig. 37).
 - Latch the (2) spring latches into place.

23. Shift the cast top/hopper lid assembly inward as far as possible to achieve a parallel fit with the surround sides. See Fig. 39. Tighten the cast top/hopper lid assembly bolts with a 3/8" socket. See page 8, Fig. 12.

24. Install and adjust the side panel magnets.
- In the hardware pack are (2) magnets, (2) spacers and (2) 10-32 x 1 1/4" bolts and nuts.
 - Bolt the magnets through the cast iron hole provided. **Important:** The spacer must be on top of the hole, the magnet on top of the spacer with the bolt going down through the hole with the nut at the bottom, under the ash lip. See fig. 38.

25. Check the fit of the cast ash lip to make sure that it can be slid in and out easily. The cast ash lip can remain in place at this time. Note: The cast side panel hinges can be moved upward if necessary to gain clearance for the cast ash lip.

Cast Side Panel Installation

- The stove body must be pulled out of the mounting frame several inches to install the cast side panels.
- Slide the cast side panel down over the hinge pins.
- Slide the stove body in and latch into place.
- Note: The cast side panels must be left in the open position to allow access to the latches.
- Slide the ash lip into place. (This would be inward until the rear of the cast iron touches the mounting frame front.)
- Close the cast side panels.
- Check the gap alignment and the top and bottom gap spacing.
- The top and bottom spacing can be adjusted by loosening the 3 bolts and sliding the hinge up or down until the spacing suits.
- With the front door closed and latched, check the vertical space alignment. The only method of changing or adjusting this gap is by bending (slightly) the hinge angle. See fig. 39.
- Due to the use of all cast iron parts, some small amounts of misalignment are expected. Since some parts are angled and some have rounded edges, this misalignment is very seldom noticeable.
- It is very important that the cast side panels open and close freely for good control board access.

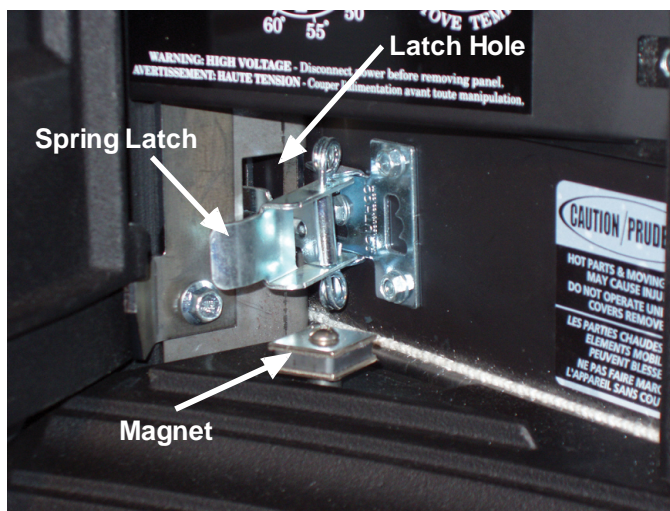


Fig. 37

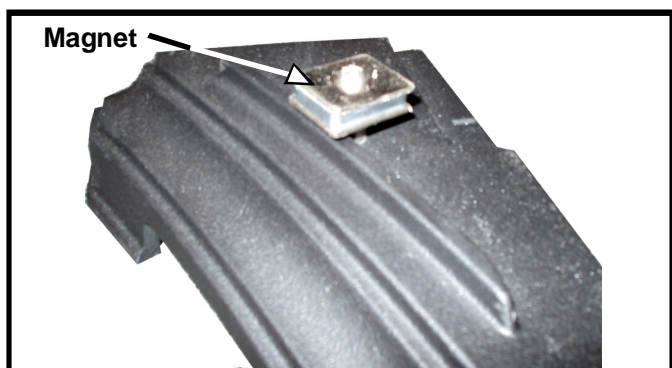


Fig. 38

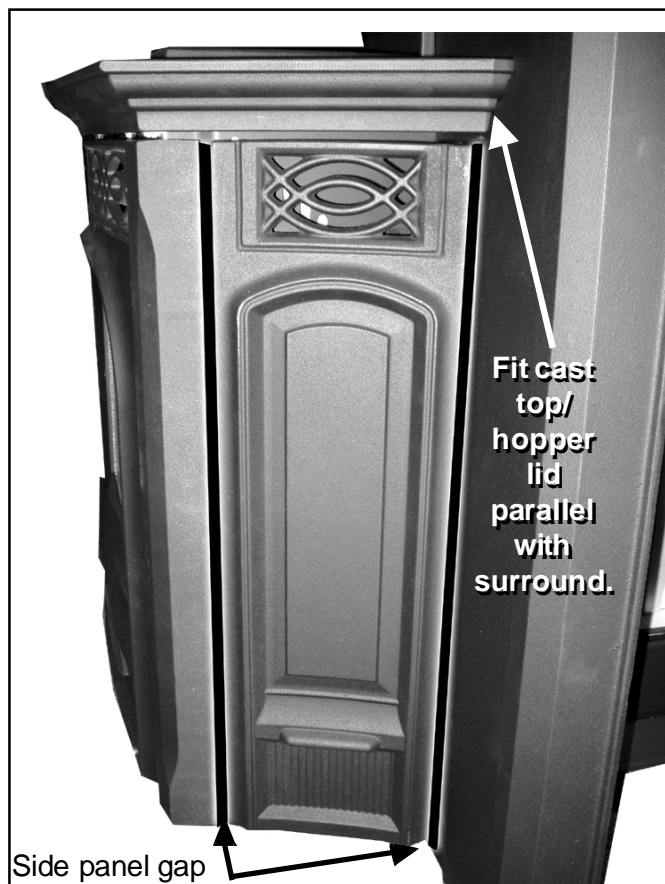


Fig. 39

Wiring

Always disconnect the power cord before the unit is pulled from the mounting frame.

As you can see, the control board is easily accessible from the rear with the body pulled out of the frame, even if it is only pulled out several inches.

- Always inspect the wiring harness of the 11 pin sockets (large white flat plug where all of the power wires terminate.)
- Always inspect the wiring harness where the wires transfer from the control to the rear inside of the body.
- Make sure there are no worn or frayed areas.

Inspect the wiring harness transition area: This is the area that comes closest to the mounting frame as the unit is slid in and out of the frame.

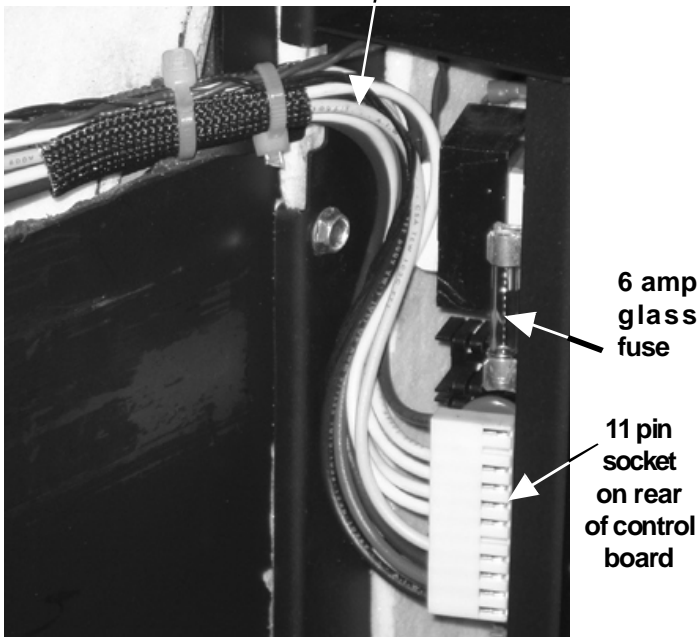


Fig. 40

REMINDERS

- Do not allow pellets or sawdust to build up on the hopper lip.
- Inspect the hopper lid gasket for damage. A good hopper lid seal is very important for proper operation.

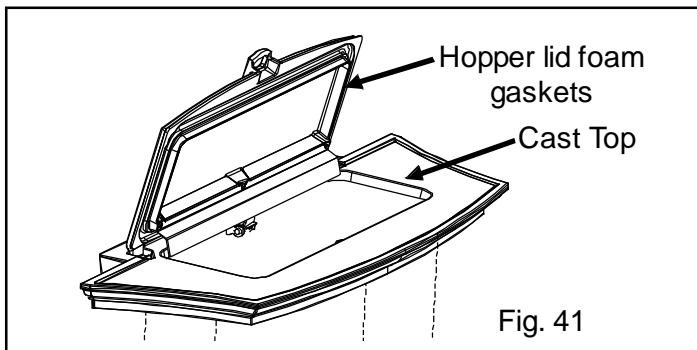


Fig. 41

Log Set Option

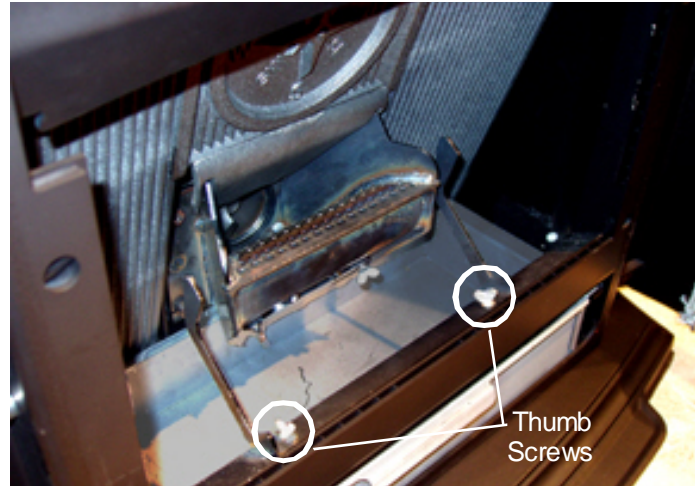


Fig.42

Install the log bracket with the two thumb screws provided.



Fig. 43

Center the log in the firebox opening with the bottom front edge over the thumb screws. The log branch tips only rest on the bracket arms for easy installation and removal.

IMPORTANT NOTE: BEFORE CLEANING THE HEAT EXCHANGERS, THE LOG AND THE LOG BRACKET MUST BE REMOVED.

After the installation is completed but before the first fire is lit, check and record the high and low draft readings.

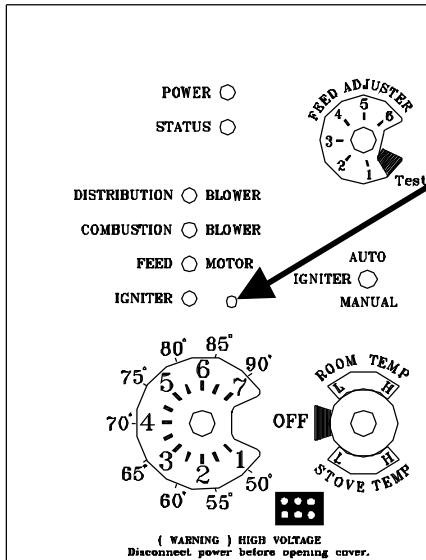


Fig.44

Combustion Motor Speed Control
Low draft only set point.
 The small straight screwdriver slot is plastic; therefore, the unit can be adjusted while in operation.

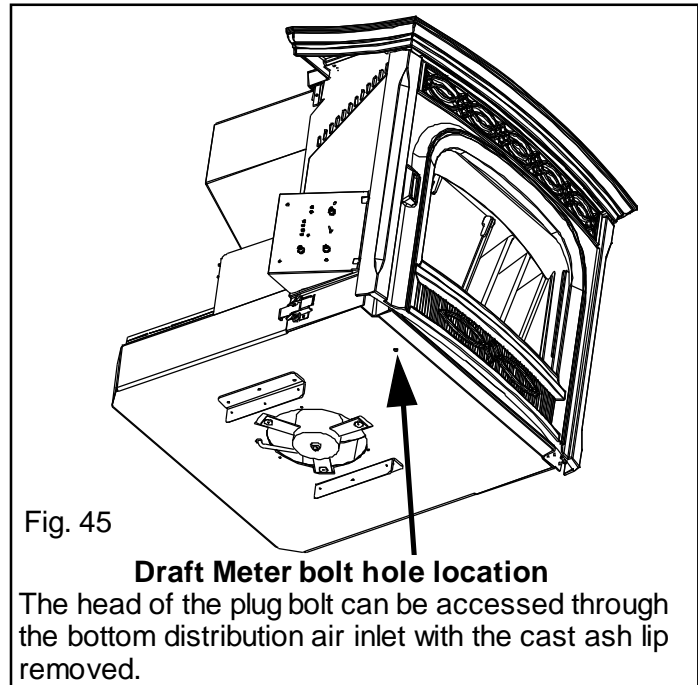


Fig. 45

Draft Meter bolt hole location

The head of the plug bolt can be accessed through the bottom distribution air inlet with the cast ash lip removed.

These units are pre-tested at the factory with exactly 120 Volts A.C., 60 Hz. They are checked and adjusted for firebox tightness, gasket leakage, motor operation and igniter operation. The stove is then factory set at a high adjustment. **NOTE: Low draft adjustment may be required. The factory low draft setting may not be correct for the units permanent installation conditions.**

The control board on the Accentra Insert is equipped with a low draft adjustment port. Located on the control face just to the right of the igniter light. See Figure 44. This voltage adjustment is provided to allow the unit to be adjusted for the household voltage where the unit is going to be in permanent operation. **NOTE:** The line voltage varies from area to area and often home to home.

The low draft voltage should be adjusted to achieve the most efficient burn on low burn or "maintenance". This voltage adjustment allows the installer to change the low voltage set point approximately 15 volts. This adjustment should be done by the installer during set up because a draft meter reading is **required** to insure proper set up.

If the unit is not adjusted properly, it does not cause a safety concern. If the unit is adjusted too high, only efficiency is lost. If the unit is adjusted too low, the low draft pressure switch will not allow the feeder motor or the igniter to operate.

A simple draft test should be performed after completing the flue pipe installation. To record the results for future reference:

1. Plug unit into a 120VAC, 60 HZ outlet.
2. Close the hopper lid and front view door. Neither pellets or a fire are required for this test.
3. With the mode selector in the "OFF" position, turn the feed adjuster to "TEST".
4. Record the high draft _____ in. W.C. (Normal is - .45 to -.55) The control will be on the High Draft for a total of 2 minutes.
5. After 2 minutes is up, the combustion motor will go down to low draft and the distribution blower will go on high. Allow approximately 15 seconds to pass for the combustion motor to slow before checking the low draft.
6. If the low draft is between .30 and .35, record the reading _____ in. W.C. If the reading is higher, slowly turn the set screw counter-clockwise until the draft lowers. If the reading is lower, very slowly turn the set screw clockwise until the draft increases.

NOTE: The test mode alternates from high to low draft every 60 seconds. If more time is needed for draft adjustment, wait until the next low draft cycle.

NOTE: In some cases, the draft may not go as low as .30 even with the set screw completely counter-clockwise.

Mobile Home Installation

Mobile home installation should be done in accordance with the Manufactured Home and Safety Standard (HUD), CFR 3280, Part 24.

When installing the Accentra in a mobile home several requirements must be followed:

1. The unit must be bolted to the floor. This can be done with 1/4" lag screws through the 5 holes in the base plate shown in Fig. 26.

2. The unit must also be connected for the outside air. See page 21 All mobile home installations require the use of outside air, this will increase the heating efficiency of the unit and keep it from suffering any effects associated with room air starvation such as poor combustion and erratic operation. Periodically check the air inlet for any obstructions such as snow or ice build up.

Kitchen exhaust fans, clothes dryers and other similar devices may cause in proper operation of the pellet stove, if, while in use it keeps the room in a negative pressure thus allowing pipe joints not completely sealed to leak exhaust into the room. Be sure to allow adequate ventilation while using such appliances

3. Floor protection and clearances must be followed. Floor protection and clearances to combustibles must be followed as per installation instructions for the stove. Clearances may only be reduced by means approved by the regulatory authority.

4. Unit must be grounded to the metal frame of the mobile home.

5. Smoke alarms and smoke detectors are recommended to be used with wood and biomass fueled stoves. When opening the firebox door some exhaust may escape into the room and set off the alarm. If this should happen ventilate the room to remove the smoke and reset the alarm, if the alarm would go off when no one was working with the stove ventilate the room and have your home checked to find the source of the leak.

WARNING

USE OF IMPROPER FUELS, FIRE STARTERS OR ALTERING THE STOVE FOR HIGHER HEAT OUTPUT MAY CAUSE DAMAGE TO THE STOVE AND COULD RESULT IN A HOUSE FIRE. USE ONLY APPROVED FUELS AND OPERATION GUIDELINES

WARNING

DO NOT INSTALL THIS UNIT IN ANY SLEEPING ROOM

CAUTION

THE STRUCTURAL INTEGRITY OF THE MOBILE HOME FLOOR, WALL, AND CEILING/ ROOF MUST BE MAINTAINED.

Safety Reminders

When installing and operating your Harman Accentra Insert, respect basic safety standards. Read these instructions carefully before you attempt to install or operate the Accentra Insert. Failure to do so may result in damage to property or personal injury and may void the product warranty.

Consult with your local building code agency and insurance representative before you begin your installation to ensure compliance with local codes, including the need for permits and follow-up inspections.

CAUTION: This appliance must be vented to the outside.

Due to high temperatures, this stove should be placed out of traffic and away from furniture and draperies.

Children and adults should be alerted to the hazards of high surface temperatures and should stay away to avoid burn to skin and/or clothing.

Young children should be carefully supervised when they are in the same room as the stove.

Clothing and other flammable materials should not be placed on or near this stove.

Installation and repair of this stove should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning will be required. It is imperative that control compartments, burners, and circulating air passageways of this stove be kept clean.

CAUTION

THE STOVE IS HOT WHILE IN OPERATION. KEEP CHILDREN, CLOTHING AND FURNITURE AWAY. CONTACT MAY CAUSE SKIN BURNS.

WARNING

KEEP COMBUSTIBLE MATERIALS SUCH AS GRASS, LEAVES, ETC. AT LEAST 3 FEET AWAY FROM THE POINT DIRECTLY UNDER THE VENT TERMINATION.

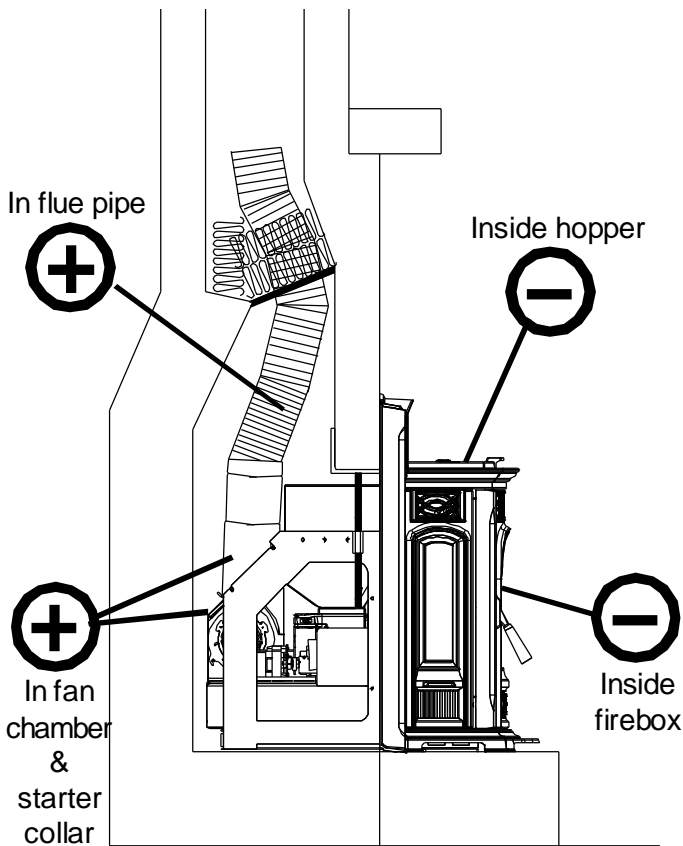


Fig.46

⊕ = Positive static pressure
 ⊖ = Negative static pressure

A combustion blower is used to extract the combustion gases from the firebox. This causes a negative pressure in the firebox and a positive pressure in the venting system as shown in fig. 46. The longer the vent pipe and more elbows used in the system, the greater the flow resistance.

The recommended maximum flue lengths for the Accentra Insert are as follows:

4" Stainless Steel Flex: 30 Lineal ft. Vertical*

4" PL Vent Pipe:

4" PL Vent Pipe: 30 Lineal ft. Vertical*

4" PL Vent Pipe: 14 ft. Vertical w/1-90° and 12 lineal ft. horizontal*

If additional 4" PL Vent fittings are required, the overall length must be reduced by:

Vertical 90° or T: 2.5'

Vertical 45°: 1.5'

Horizontal 90° or T: 5.0'

Horizontal 45°: 2.5'

3" PL Vent Pipe:

20 Lineal ft. vertical*

8 Lineal ft. vertical w/1-90° & 8 lineal ft. horizontal*

If additional 3" PL Vent fittings are required, the overall length must be reduced by:

Vertical 90° or T: 2.0'

Vertical 45°: 1.0'

Horizontal 90° or T: 4.0'

Horizontal 45°: 2.0'

** Long runs of flex or PL vent pipe installed directly vertical from the flue stub may require more frequent cleaning due to fly ash falling off inside and collecting directly above the combustion blower outlet.*

Any use of horizontal venting will require more frequent cleaning. It is the responsibility of the installer to make sure all flue configuration are accessible for cleaning.

4" stainless steel flex vent piping is only allowed for use in masonry fireplaces and chimneys or factory built wood burning fireplaces with class A metal chimneys. All pellet vent pipe whether flex type, PL or another approved type must be secured together either by means provided by pipe manufacturer or by 3 screws at each joint.

DO NOT INSTALL A FLUE DAMPER IN THE EXHAUST VENTING SYSTEM OF THIS UNIT.

DO NOT CONNECT THIS UNIT TO A CHIMNEY FLUE SERVING ANOTHER APPLAANCE.

Vent Pipe

Be sure to use approved pellet vent pipe wall and ceiling pass-through fittings to go through combustible walls and ceilings. Be sure to use a starting collar to attach the venting system to the stove. The starting collar must be sealed to the vent pipe with high temp silicone caulking.

4" stainless steel flex vent piping is only allowed for use in masonry fireplaces and chimneys or factorybuilt woodburning fireplaces with class A metal chimneys.

Pellet venting pipe (also known as PL vent) is constructed of two layers with air space between the layers. This air space acts as an insulator and reduces the outside surface temperature to allow a clearance to combustibles of only 3 inches. The sections of pipe lock together to form an air tight seal in most cases; however, in some cases a perfect seal is not achieved. For this reason and the fact that the Accentra Insert operates with a positive vent pressure, we specify that the joints also be sealed with clear silicone.

Outside Air

Outside air is optional (not required) except in mobile homes and where building codes require it to be installed. The benefit of outside air is mainly noticed in small, very tight houses.

The outside air kit consists of a flue stub pipe, fiberglass gasket, silicone gasket, intake box and a section of flex pipe. See Fig. 47.

An adjustable chimney intake extension, part # 1-00-674104 is available to be used on masonry chimneys only. See Fig. 48.

Additional information and diagrams can be found on pages 22 thru 26 under venting.

To install outside air, use kit part number 1-10-674080. Follow the installation instructions provided with the kit.

HRV

When installing in a house with a Heat Reclaiming Ventilation System (HRV) be sure the system is balanced and is not creating a negative pressure in the house.

If the Accentra Insert is installed with the 100% outside air kit, the HRV should not have to be adjusted.

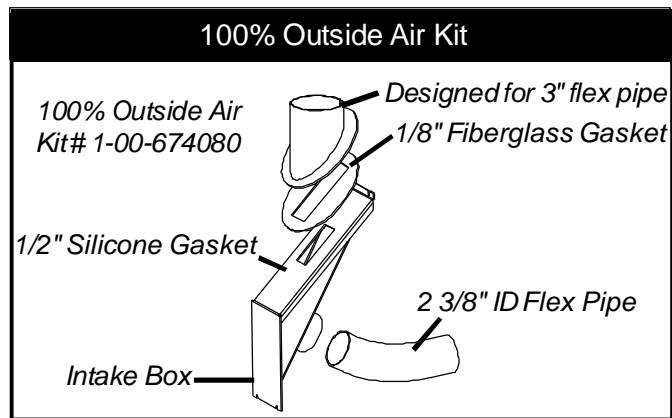


Fig. 47

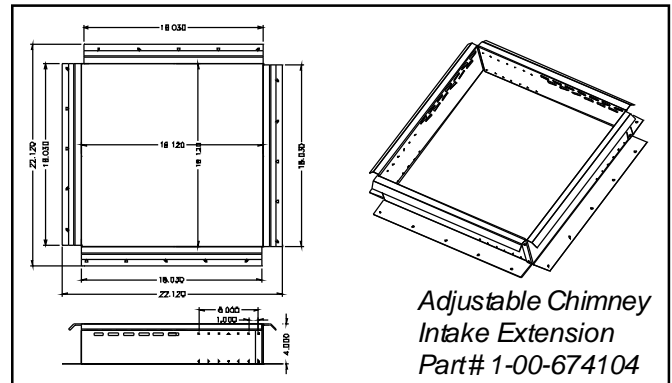


Fig. 48

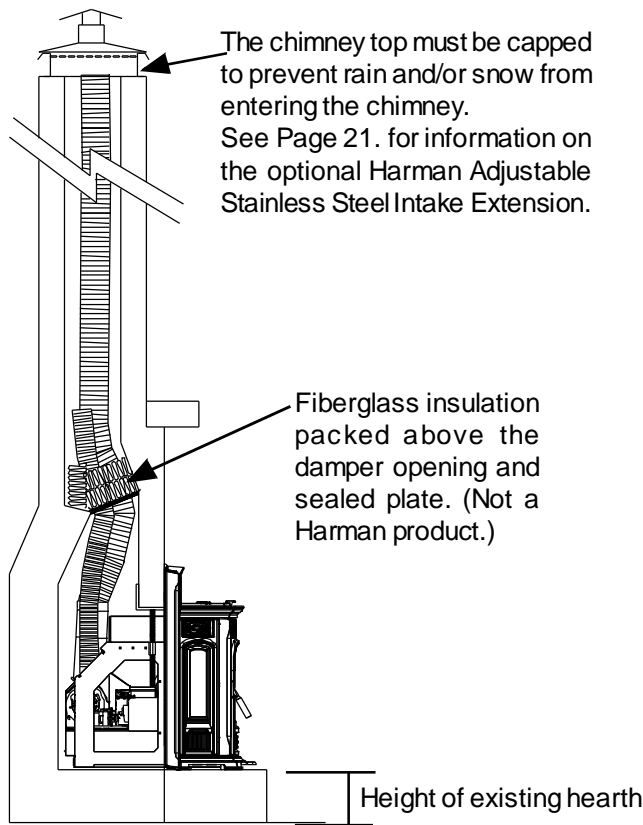


Fig. 49

#1 Installing into an existing fireplace chimney (US & Canada)

This method provides excellent venting with 100% outside air which is the most efficient operation of this unit. This method also provides natural draft in the event of a power failure.

A 4 inch stainless steel flex pipe is needed for the flue pipe, and 3" aluminum or Stainless Steel Flex Pipe is used for the intake.

In Canada and some places in the US it is required that the vent pipe extend all the way to the top of the chimney.

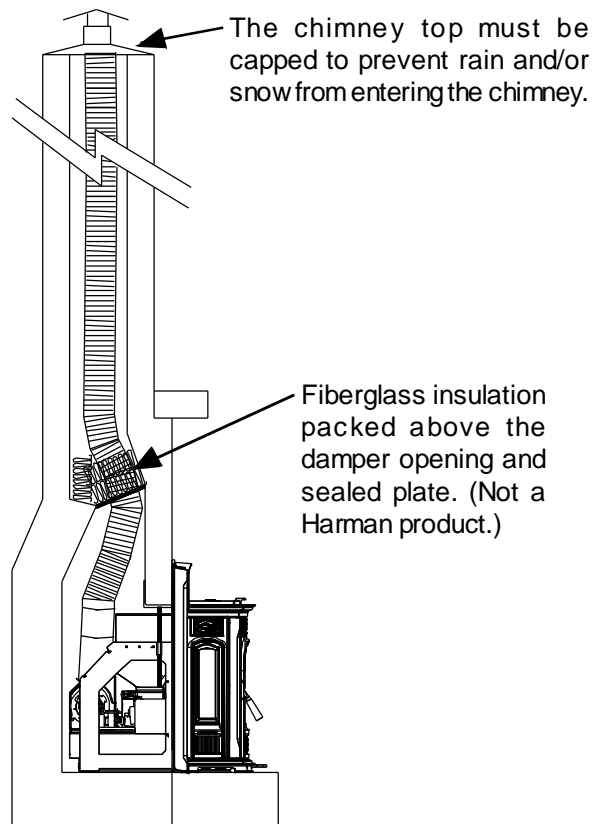


Fig. 50

#2 Installing into an existing fireplace chimney (US & Canada)

This method provides excellent venting for normal operation. This method also provides natural draft in the event of a power failure.

The damper area must be sealed with a steel plate or fiberglass. A cap should be installed on the chimney to keep out rain.

Combustion air is provided from the living area and enters the feed system from around the wing and stove body spaces.

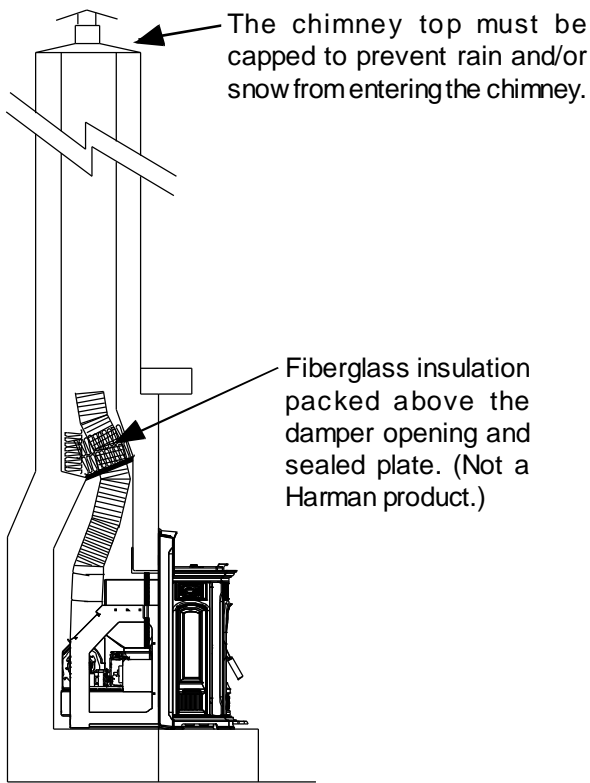


Fig.51

#3 Installing into an existing chimney (US only)

This method provides excellent venting for normal operation. This method also provides natural draft in the event of a power failure. If the chimney condition is questionable you may want to install a liner as in method #2.

This is the minimum allowed vent pipe using 4" stainless steel flex pipe.

The vent pipe must extend past the damper sealing area by at least 12 inches.

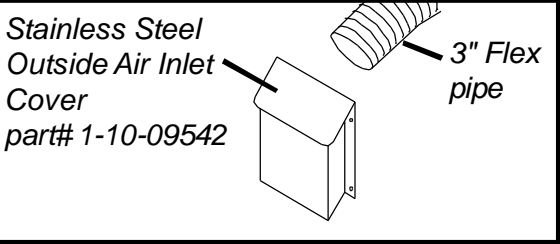
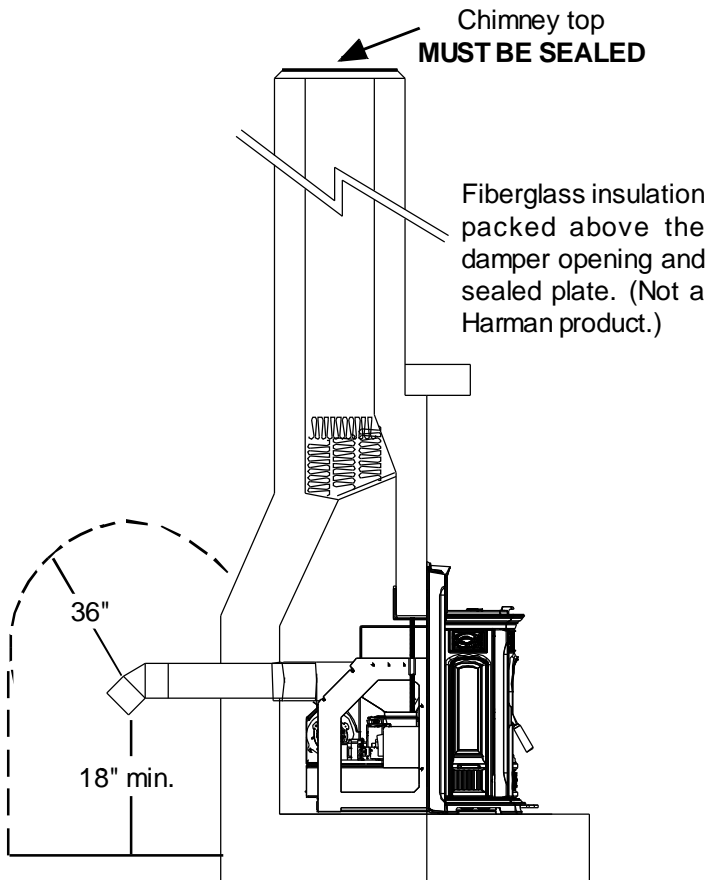
Note: The fiberglass insulation must not be allowed to expand to the point that it covers the end of the flex pipe.

The chimney should be capped with any style cap that will not allow rain or snow to enter.

#4 Preferred method

This method provides excellent venting for normal operation and in a fireplace with inadequate flue space, or a height of over 30 feet. A 3" or 4" PL vent pipe should be used with an optional swivel flue stub.

NOTE: The flue stub insulation wrap must still be used with this method. See page 13, Fig. 27 & 29. With a 100% outside air kit the outside air can be installed in the same manner as the flue pipe.



CAUTION
KEEP COMBUSTIBLES (SUCH AS GRASS, LEAVES, ETC.) AT LEAST 3 FEET AWAY FROM THE FLUE OUTLET ON THE OUTSIDE OF THE BUILDING

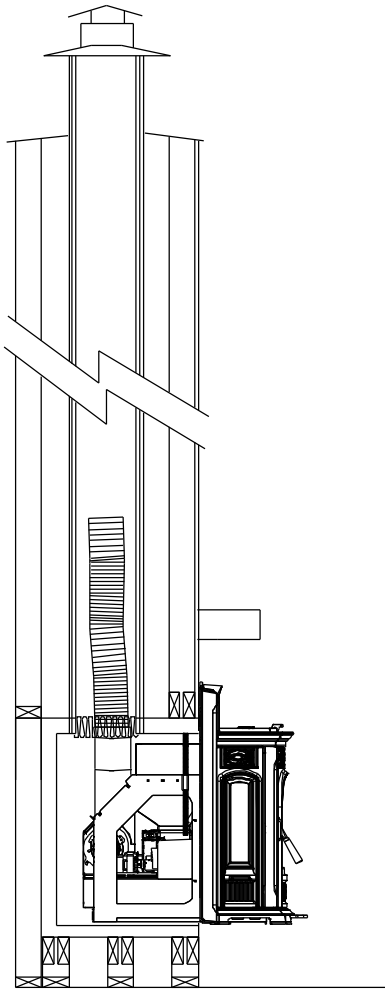


Fig. 53

Installing the Accentra Insert into an existing factory built wood burning fireplace

When installing the Accentra Insert into a factory built wood burning fireplace, several things need to be taken into consideration.

The size of the fireplace opening. Will the unit fit into the opening? Many of these units have metal smoke shields inside the top that can be removed to gain height. Often the side and rear refractory can be removed to gain depth and width.

Some factory built fireplaces have a firebox that is lower than the opening. Many have a bottom lip that is higher than the hearth. This is an issue with the Harman Accentra Insert since we do not have anything to fill the space between the bottom of the unit and the hearth. It would be the responsibility of the installer to supply something to fill this space and be strong enough to support the front of the insert.

As for the size and position of the existing chimney and its damper system, the Harman Accentra Insert has a swivel style flue stub that will allow the stainless steel flex pipe to exit into **most** factory built fireplaces.

OPTIONAL HOPPER CONFIGURATIONS FOR SMALLER FIREPLACE OPENINGS:

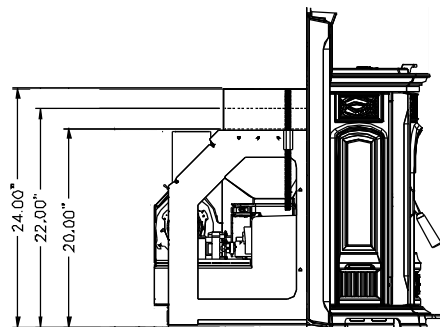
The Harman Accentra Insert can be factory built with shorter hopper configurations.

The standard requires a 24" opening. Part #1-90-00674

Option 1: Requires a 22" opening height. Part #1-90-00675

Option 2: Requires a 20" opening height. Part #1-90-00676

Keep in mind the hopper capacities will decrease with the optional heights.



Note: If the Harman Accentra Insert is installed into a factory built wood burning fireplace, this label (Harman part # 3-90-00675) MUST be attached to the altered fireplace.

THIS FIREPLACE HAS BEEN ALTERED TO ACCOMODATE A FIREPLACE INSERT AND SHOULD BE INSPECTED BY A QUALIFIED PERSON PRIOR TO REUSE AS A CONVENTIONAL FIREPLACE.

Fig. 54

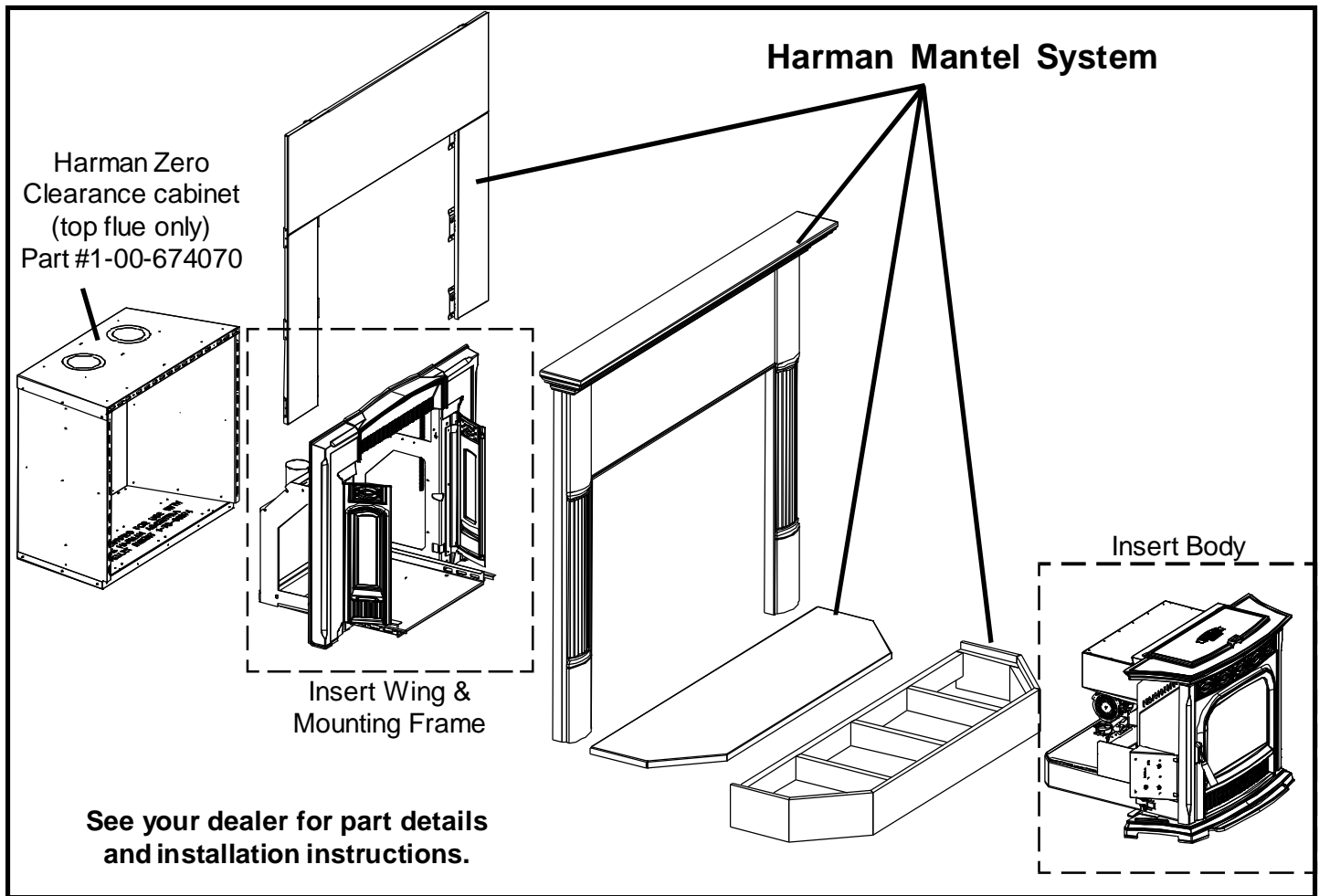


Fig. 55

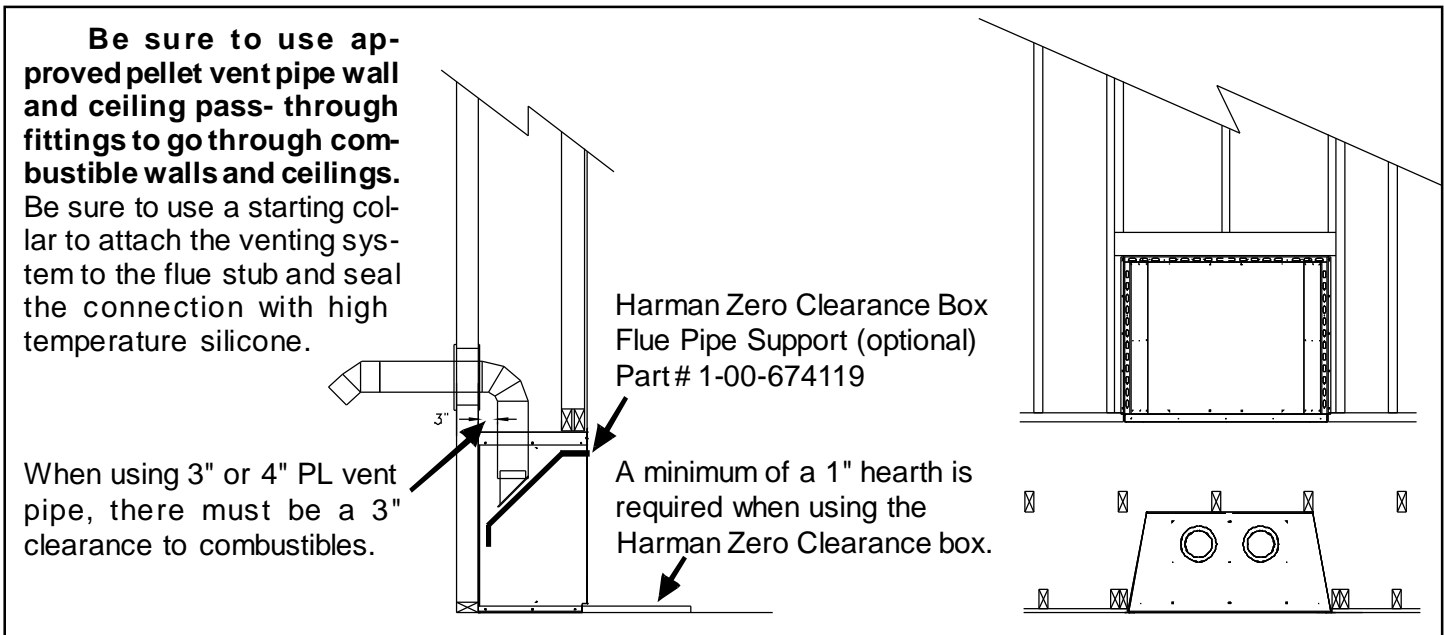


Fig. 56

Combustible materials are allowed to touch the cabinet anywhere behind the front mounting flanges except vent clearance areas. The hearth substructure may be built of combustible material although a non-combustible hearth surface (tile, stone, metal, glass) must extend as far as shown on the UL label.

Requirements for Terminating the Venting

WARNING: Venting terminals must not be recessed into a wall or siding.

NOTE: Only PL vent pipe wall pass-throughs and fire stops should be used when venting through combustible materials.

NOTE: Always take into consideration the effect the prevailing wind direction or other wind currents will cause with flyash and/or smoke when placing the termination.

In addition, the following must be observed:

A. The clearance above grade must be a minimum of 18".¹

B. The clearance to a window or door that may be opened must be a minimum of 48" to the side and 48" below the window/door, and 12" above the window/door. ¹

(with outside air installed, 18")

C. A 12" clearance to a permanently closed window is recommended to prevent condensation on the window.

D. The vertical clearance to a ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the center-line of the terminal must be a minimum of 18".

E. The clearance to an unventilated soffit must be a minimum of 12".

F. The clearance to an outside corner is 11" from center of pipe.

G. The clearance to an inside corner is 12".

H. A vent must not be installed within 3 feet (90 cm) above a gas meter/regulator assembly when measured from the horizontal center-line of the regulator.¹

I. The clearance to service regulator vent outlet must be a minimum of 6 feet.¹

J. The clearance to a non-mechanical air supply inlet to the building or the combustion air inlet to any other appliance must be a minimum of 48"¹

K. The clearance to a mechanical air supply inlet must be a minimum of 10 feet.¹
(with outside air installed, 6 feet)

L. The clearance above a paved sidewalk or a paved driveway located on public property must be a minimum of 7 feet.^{1,2}

M. The clearance under a veranda, porch, deck or balcony must be a minimum of 12 inches.^{1,3}

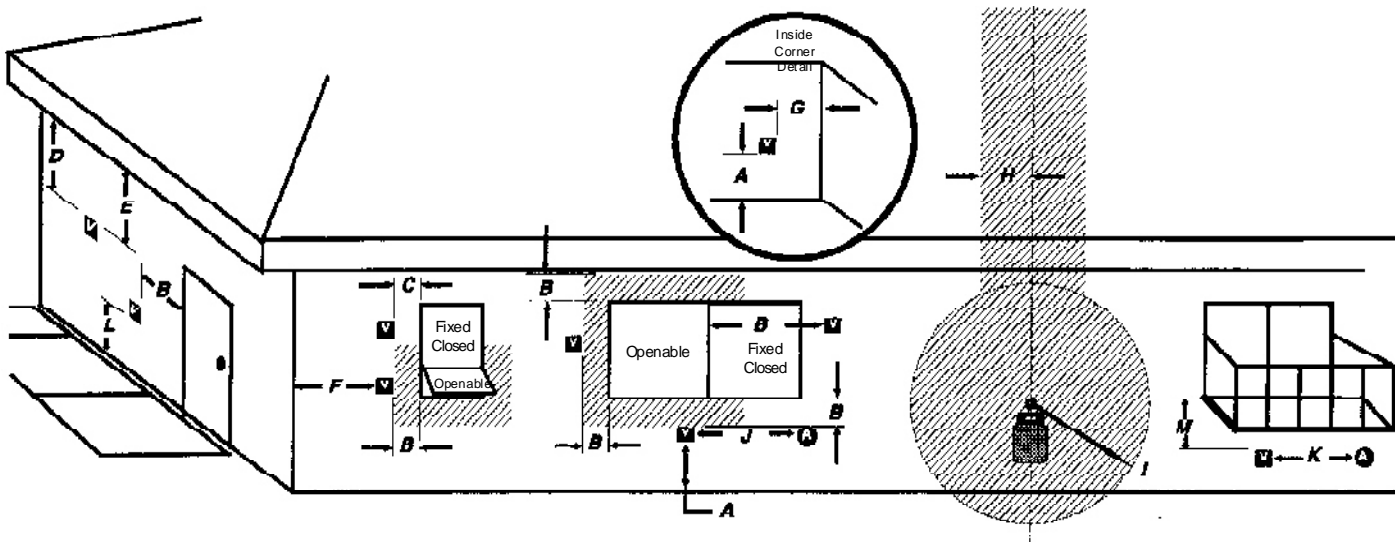
NOTE: The clearance to vegetation and other exterior combustibles such as mulch is 36" as measured from the center of the outlet or cap. This 36" radius continues to grade or a minimum of 7 feet below the outlet.

¹Certain Canadian and/or Local codes or regulations may require different clearances.

²A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.

³Only permitted if veranda, porch, deck, or balcony is fully open on a minimum of 2 sides beneath the floor.

NOTE: Where passage through a wall, or partition of combustible construction is desired, the installation shall conform to CAN/CSA-B365. (if in Canada)



V = Vent terminal

A = Air supply inlet

[Shaded Area] = Area where terminal is not permitted

The unit should be out and cool to clean the door glass. It may not always be possible to allow the unit to cool off before cleaning. Therefore, if the unit is turned to the lowest setting about 1 hour before cleaning, it will make it possible to clean the glass with the unit in operation.

Any glass cleaner with a high amonia content will work the best. Use only non-synthetic cleaning rags such as cotton or paper towels.

CAUTION: Take care when spraying cleaner on the inside surface of the glass. The glass may be hot enough to cause undesirable fumes to fill the area around the unit very rapidly. Gloves and eye protection are recommended.

Disposal of ashes: Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible floor or on the ground, well away from all combustibile materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

Soot and fly ash: Formation and need for removal. The products of combustion contain small particles of fly ash. The fly ash will collect in the exhaust venting system and will restrict the flow of the flue gases. Pellet fuels have different ash contents **depending on what type of wood has been used to make the pellets. We recommend to clean the system after approximately 1 ton of pellets have been burned and judge from that how often the stove should be cleaned, remember if you change pellets it may change how often you have to clean your stove.**

Incomplete combustion such as occurs during start up, shutdown, or improper operation of the heater will lead to some soot formation, which will collect in the exhaust venting system. The exhaust vent should be inspected at least once every year to determine if cleaning is necessary.

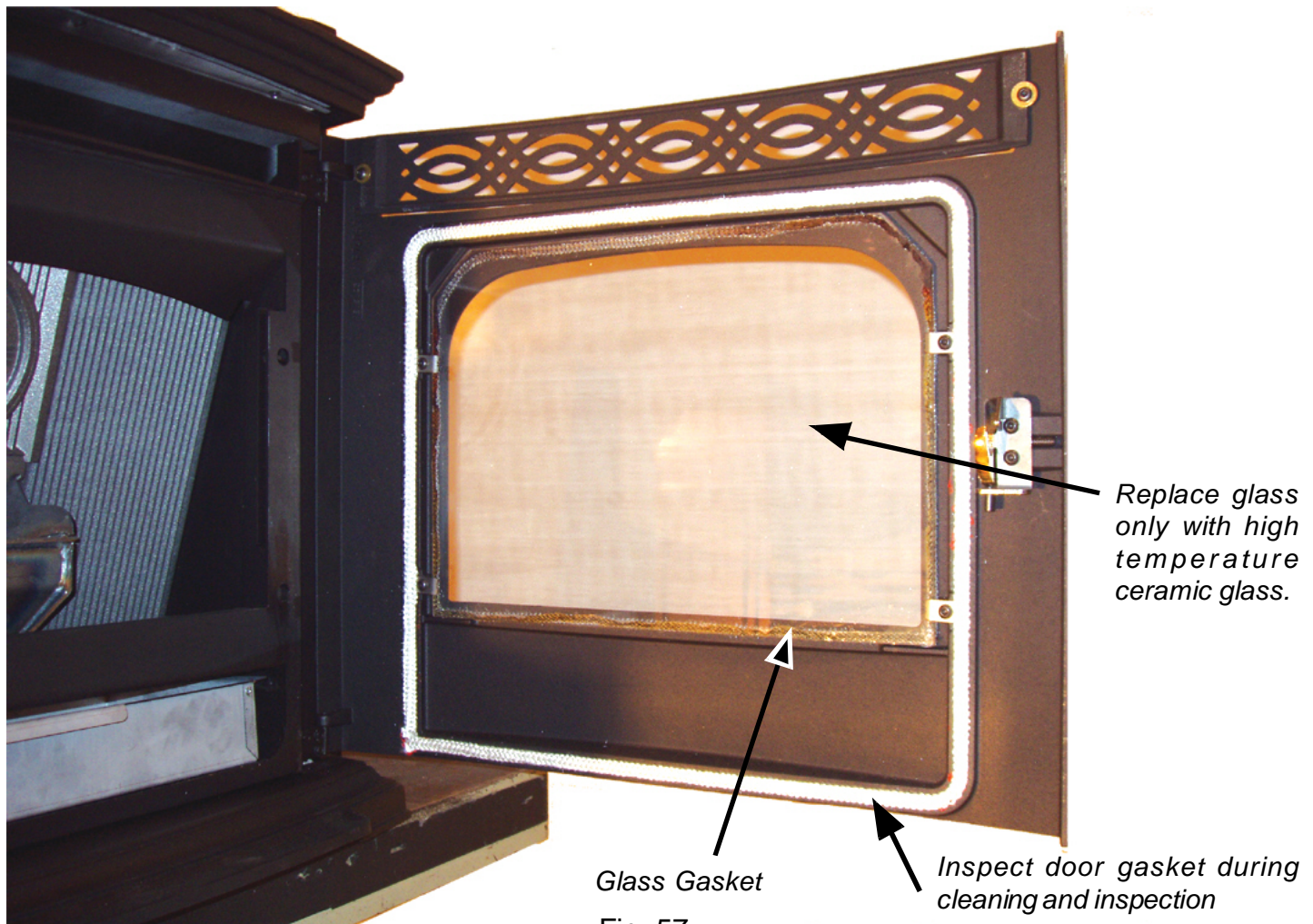


Fig. 57

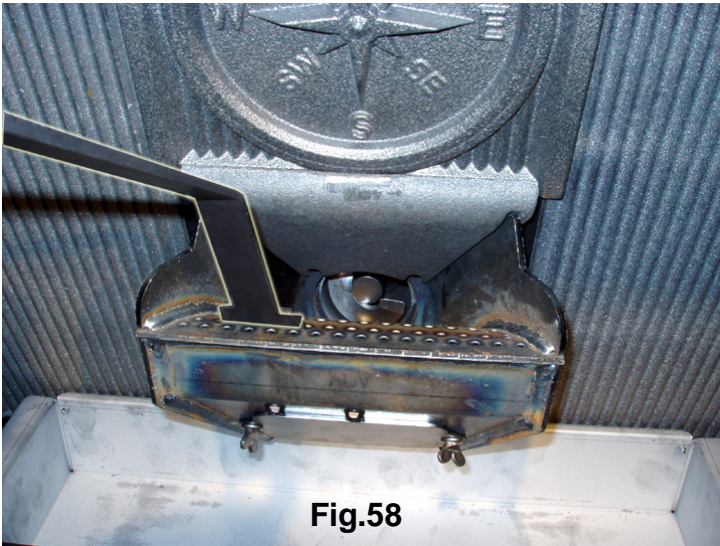


Fig.58

Burn Pot Cleaning and Maintenance

1. Scrape the top holed surface and sides of the burn pot down to auger tube.(Fig 58) It is not necessary to completely remove all material from the burn pot. The excess will be pushed out during the next use.
2. Loosen the (2) wing thumb screws on the lower front angle of the burn pot. (Fig. 59)
3. Lift off the clean-out cover (Fig.59) to open the bottom clean-out chamber. (Fig.60)

DANGER
Disconnect the power to the unit before removing cover.

4. Clean ash buildup from inside the chamber while cover is off. Use the scraper to tap on the top front edge of the burn pot. This will help knock pieces of ash, loosened by the scraping process, down through the holes. It also helps knock scale off of the igniter element.

Figure 60

The igniter is made to be removable for service by insulated male/female wire connectors. These connections between the hot leads (the wires inside the burn pot) and the cold leads (the wires from the control board) are always pulled to the inside rear of the feeder body. **(Not coiled inside the burn pot.)**

It is very important that these connections are to the inside rear of the feeder body. Also, the extra wire of the igniter wire service loop must be pulled out through the rear of the feeder and tied up so that it will not be damaged by any moving parts.

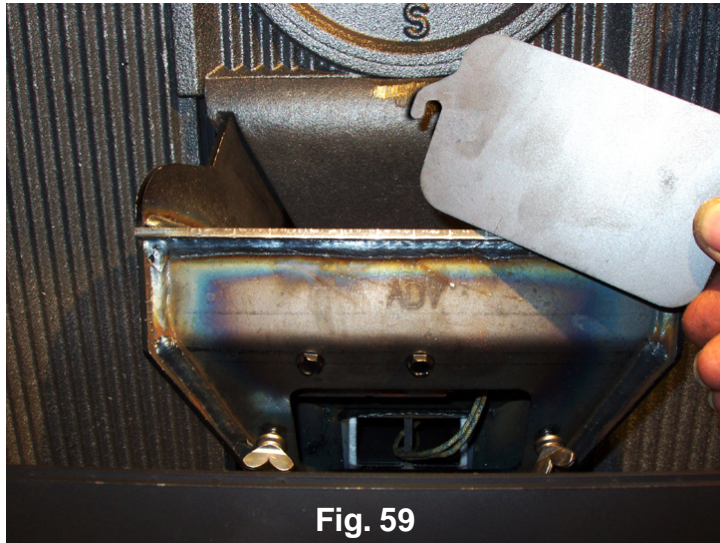


Fig. 59

DANGER
Disconnect the power to the unit before removing cover.

WARNING
Use caution when cleaning burn pot clean-out chamber. Do not damage the high temperature igniter wires.

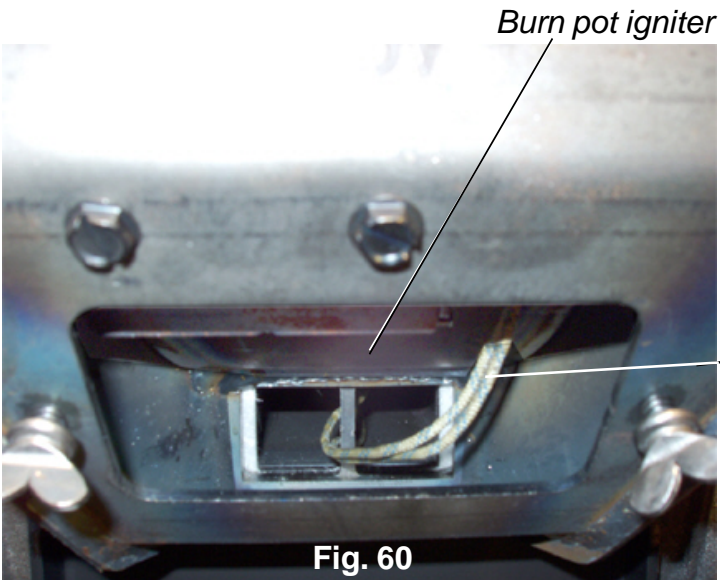


Fig. 60

*Igniter hot lead wires
(high temperature)*

Note: The hot lead/cold lead connection must always be pulled to the rear of the feeder body before operation.

Viewed from below through the ash pan opening.

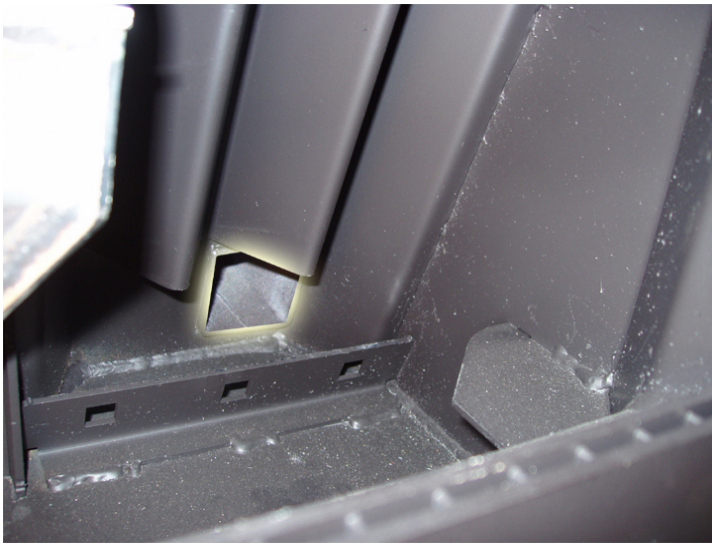


Fig. 61

There is a 2" square exhaust tube on each side (lower left and right corners) of the firebox. They can only be seen with the cast heat exchanger covers removed.



Fig. 62

Cleaning the Heat Exchanger tubes

Using the cleaning brush provided, clean these tubes after every 1 ton of pellets are used. These tubes are an important part of the heat exchanger. Efficiency will be lost if they are not properly maintained.

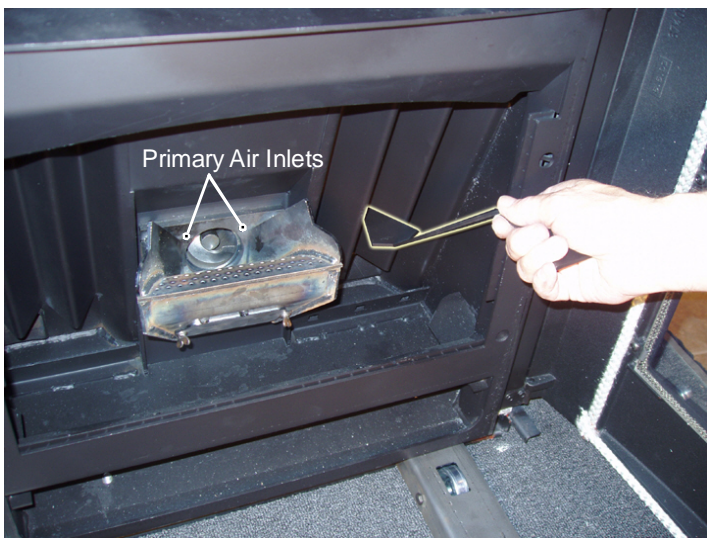


Fig. 63

Cleaning the Heat Exchanger

The accordion heat exchanger surfaces are the primary source of heat transfer into the room. Therefore, it is very important to keep them clean from flyash and soot buildup.

- The heat exchanger surfaces should be cleaned after approximately every 1 ton of pellets are used.
- Use the scraper provided to clean all the way into the point.
- Note: An old paint brush works well to clean these surfaces.
- Note: The unit "must be cold" before using anything other than a wire brush.
- There are 2 primary air inlet holes on the rear flange of the burnpot. They should be checked for blockage and cleaned with a vacuum if necessary. Note: The bottom of the flame guide has 2 notches that match the holes.

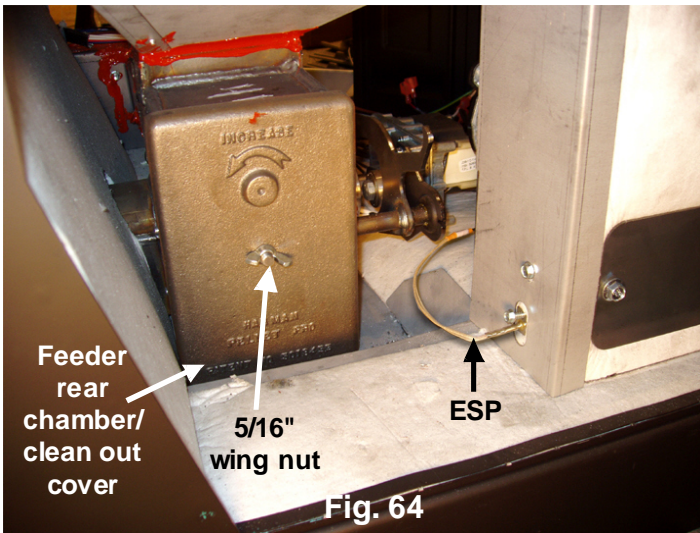


Fig. 64

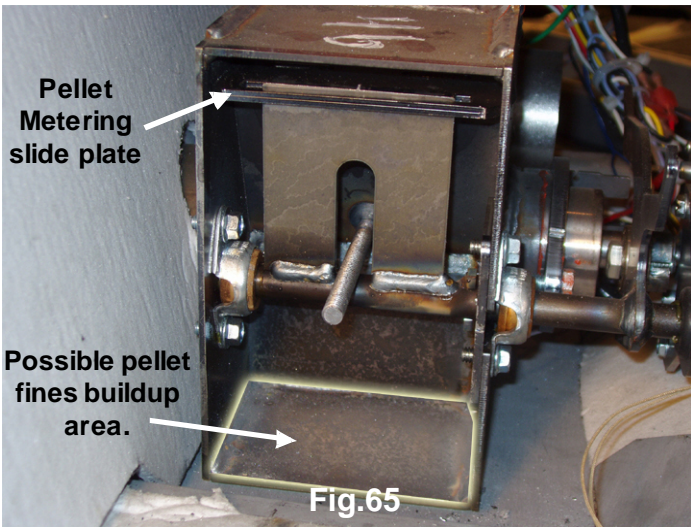


Fig. 65

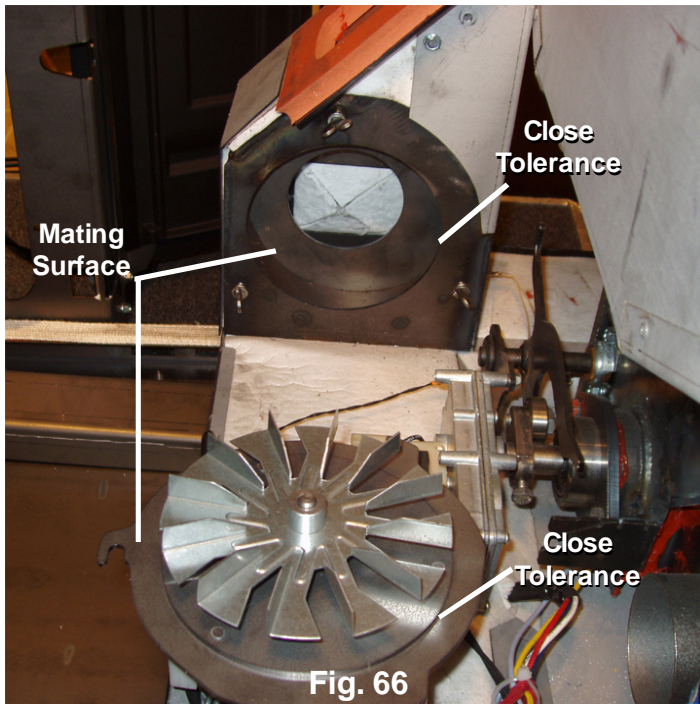


Fig. 66

Feeder Chamber

This chamber may get a buildup of fines from the feeder mechanism movement. This area should be checked and cleaned at least once a year.

To remove the feeder cover:

- Remove the 5/16" wing nut.
- Slide the cover off of the threaded stud.
- Inspect and clean the inner chamber if necessary. See Fig. 65.
- Reinstall the cover making certain it is centered on the feeder body and tighten as tightly as you can by hand.

The combustion blower is made to be removed easily for inspection and cleaning. See Fig. 67.

The combustion blower is mounted on a precision cut gasketless mounting plate. This plate is held into place with (3) thumb screws. See Fig. 67.

To remove the combustion blower:

- Turn the thumb screws counterclockwise approximately 5 turns. Rotate the entire assembly counter clockwise until the points of the retaining slots are visible.
- Remove the blower assembly with the fan blade by pulling it directly away from the blower housing.
- The cord on the motor is long enough to allow the motor to be set down on the black plastic fan cover. This allows for easy access to inspect and clean the area. See Fig. 66.

With the blower assembly out, inspection should be done on the surfaces of the blower assembly and the housing opening where they meet. These surfaces **MUST** be clean and free from dirt, grit, flyash, soot or nicks in the metal. This gasketless seal relies on an extremely close tolerance. Therefore, anything other than a clean joint may cause exhaust gases and/or flyash to escape.

The assembly can only be reinstalled in one position: with the motor winding in the upward location. See Fig. 67. The mounting plate will not allow for any other position.

Always make sure that the assembly is fully seated and the (3) thumb screws are tightened before operating the unit.

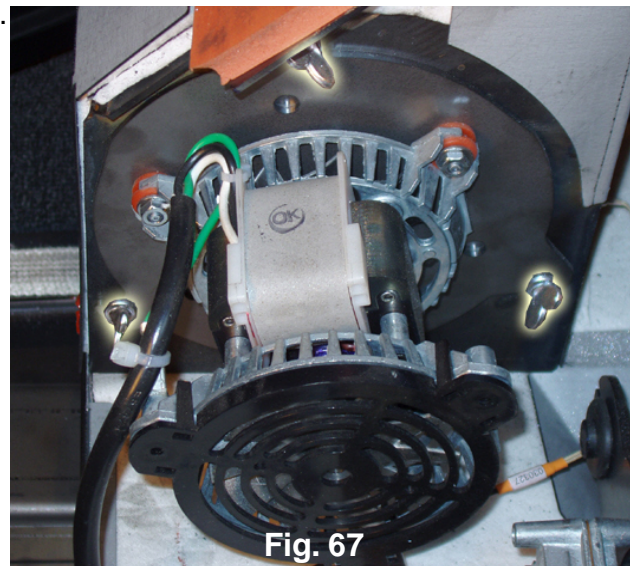
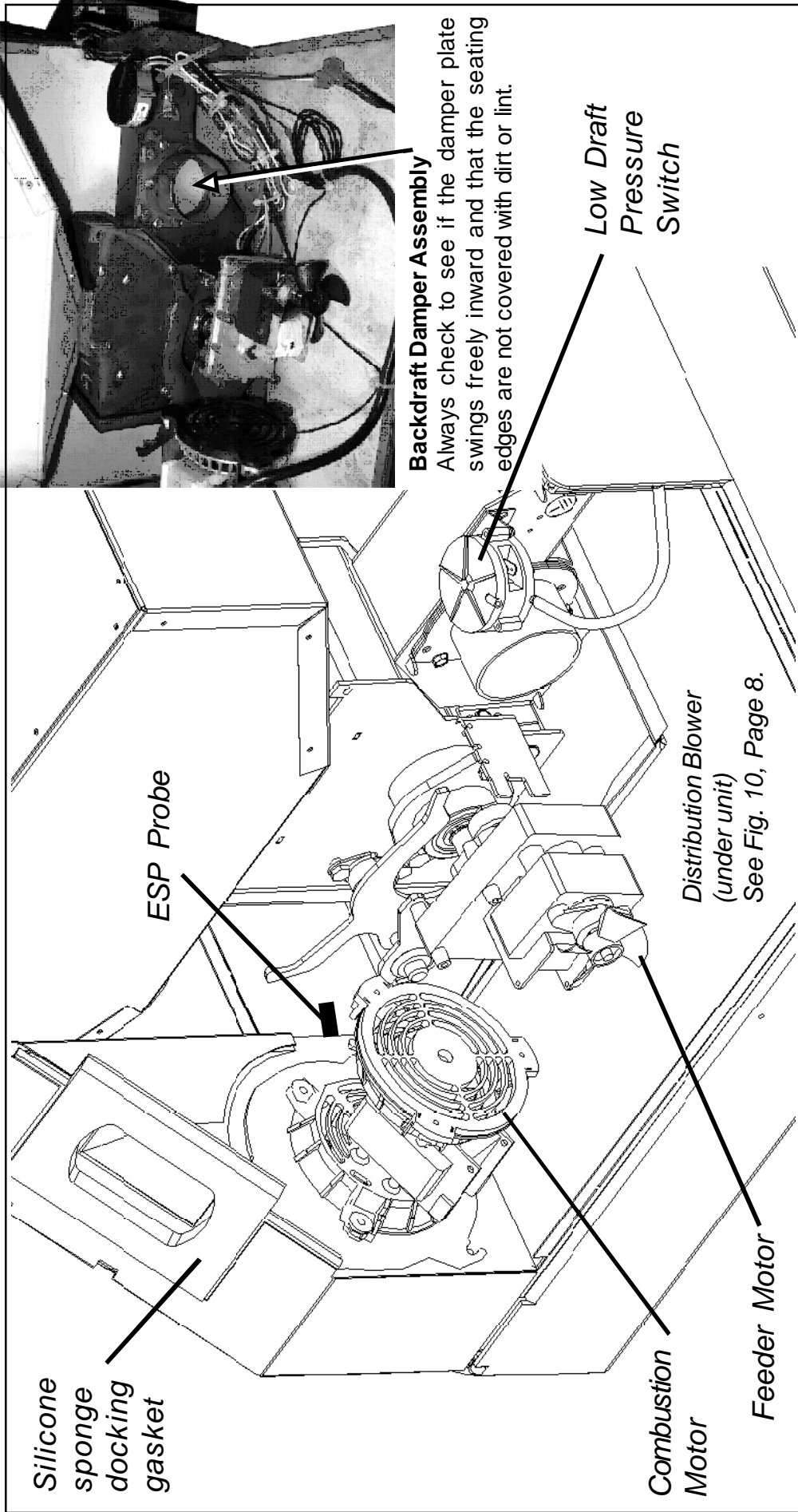


Fig. 67

Accentra Insert Motor & Component Locations



Accentra Pellet Insert Safety Devices

The **Combustion Motor Fuse** is a thermal overload one-time fuse link within the motor windings. Should the distribution motor fail with the unit operating over 80%, this fuse will protect the other components by melting off at a set temperature. With the fuse blown, the combustion motor will stop. In turn, the feeder motor will not operate and the stove will go out. This may only happen when the unit is on Maximum (#7 on the Temperature Dial, #6 on the Feed Adjuster and Distribution blower not operating). If this fuse does blow, the unit will need service.

The **Control Board/ESP** combination is responsible for all high limit safety control. There are 2 high limits, one normal operation high limit and one backup high limit. The control has an automatic diagnostic circuit that continuously monitors the ESP and Room Sensor for faults. If a fault should occur, the control sends a status alert and at the same time the unit goes down to minimum feed/minimum burn as a safety condition.

The **Low Draft Pressure Switch** is a differential pressure switch that senses the pressure between the firebox and the room. If the pressure becomes too low for proper combustion, the switch opens, turning off the feeder motor and the igniter element. This switch is connected into the AC (high voltage) wires; therefore, the control may show the feeder motor and igniter lights "on" but they are not.

FEEDER DOES NOT FEED

1. No pellets in hopper.
2. Firebox draft may be too low for low draft pressure switch in feeder circuit to operate. **Check for open doors**, loose or missing gasket on doors or hopper lid, faulty pressure switch.
3. Feed motor will not run until ESP senses 165 deg. F. Maybe you did not put enough pellets in the burn pot before lighting the fire.
4. Something is restricting flow in the hopper or causing the slide plate to stick.
5. Feed motor has failed.

PARTIALLY BURNED PELLETS

1. Feed rate too high.
2. Draft too low. (Check burn pot clean out slide and door gasket).
3. Burn pot or heat exchanger tubes may need to be cleaned.
4. Combination of all the above.
5. #6 status blink: A 6 blink control board status indication is caused by poor or incomplete combustion. The Automatic Ignition circuit board has the ability to track the combustion through feed settings and ESP temperatures. When the control board has calculated poor or incomplete combustion it will shut down the unit as a safety feature. (Poor or incomplete combustion is a contributor of creosote which may cause a chimney fire)
A 6 blink status may be caused by several things:
 1. Blocked or partially blocked flue.
 2. Blocked or partially blocked inlet air.
 - a. backdraft damper on the inlet pipe may be stuck closed.
 - b. if outside air is installed the inlet cover may be blocked.
 3. The air chamber under the burnpot may be filled with fines and small bits of ash.
 4. The holes in the burnpot may be getting filled with ash or carbon buildup.
 5. Combustion blower fan blades may need cleaned.
 6. Combustion intake assembly not properly latched.
 7. No fuel in hopper

SMOKE SMELL

Seal the vent pipe joints and connection to frame with silicone.

FIRE HAS GONE OUT

1. No pellets in hopper.
2. Draft setting is too low.

3. Something is restricting fuel flow.
4. Feed motor or draft motor has failed.
5. Power failure or blown fuse.

SMOKE IS VISIBLE COMING OUT OF VENT

1. Air-fuel ratio is too rich.
 - A. Feed rate too high.
 - B. Draft too low caused by a gasket leak.

LOW HEAT OUTPUT

1. Feed rate too low
2. Draft too low because of gasket leak.
3. Poor quality or damp pellets
4. Combination of 1. and 2.

Helpful Hints

Cleaning Burn Pot

Whenever your stove is not burning, take the opportunity to scrape the burn pot to remove carbon buildup. A vacuum cleaner is handy to remove the residue. Be sure the stove is cold if you use a vacuum.

Carbon buildup can be scraped loose with the fire burning using the special tool provided with your stove. Scrape the floor and sides of the burn pot. The carbon will be pushed out by the incoming fuel. Always wear gloves to do this.

Removing Ashes

Turn the Temp Dial to number 1 approximately 30 minutes before removing ashes. This will result in a cooler stove and ash pan.

Maximum Feed Adjuster settings are not needed in most cases. Operating in the normal range (#4) is recommended when maximum heat output is not required. The ESP probe prevents the stove from being over-fired.

Keep the stove free of dust and dirt.

Fuel

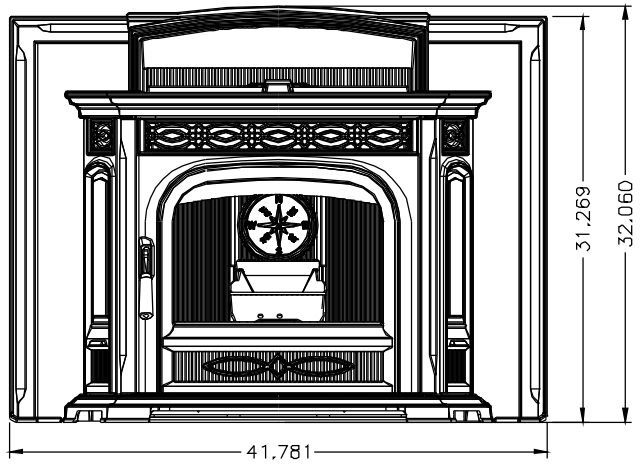
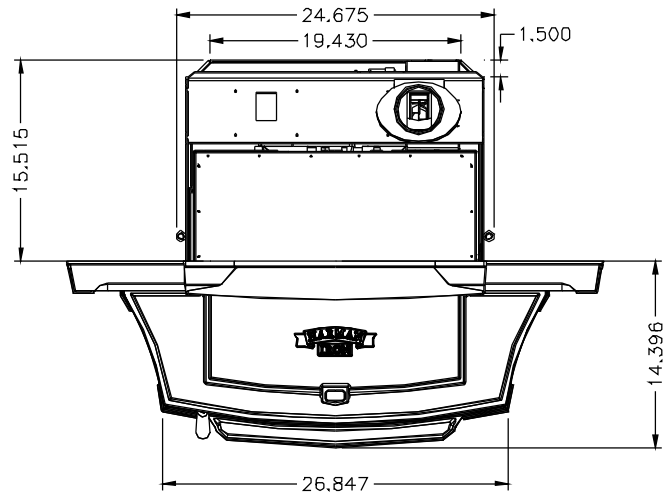
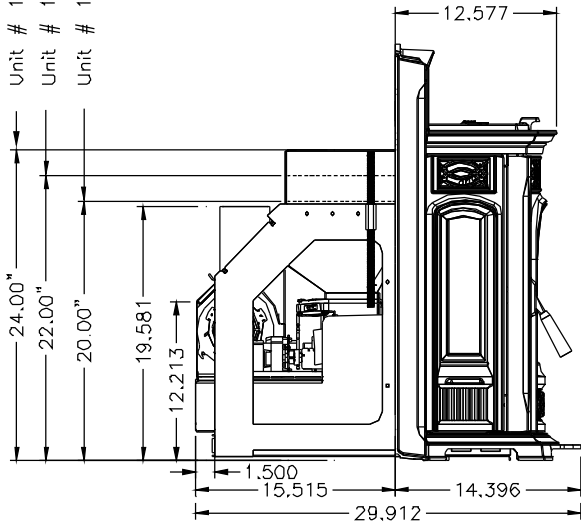
Pellet fuels are put into 3 categories in terms of ash content. Premium at 1% or less, Standard at 3% or less and all others at 3% or more.

The Accentra is capable of burning all 3 categories of pellets due to a patented feeder and burn pot system.

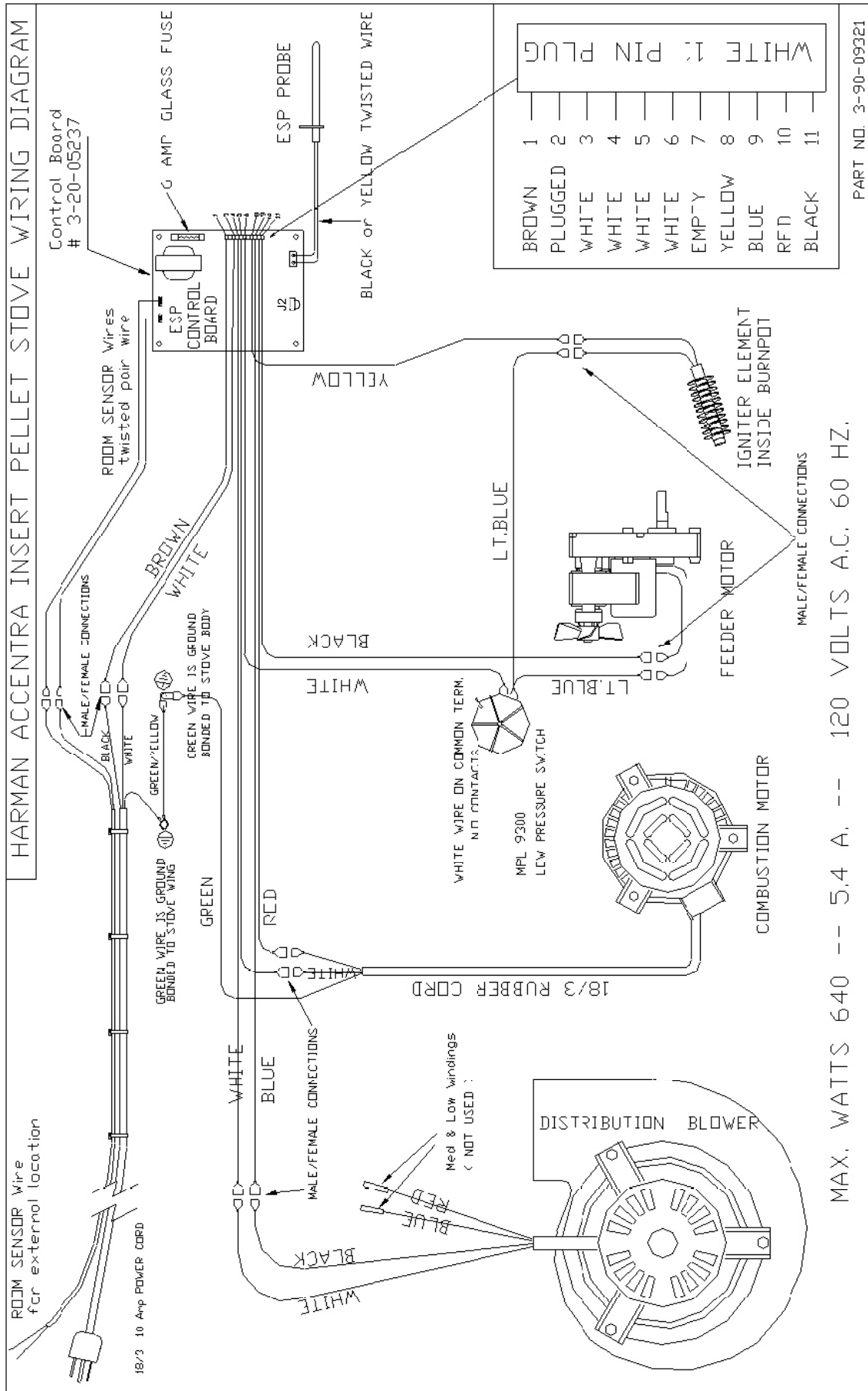
It should be noted, however, that higher ash content will require more frequent ash removal and may provide less BTU's per pound. Normally, standard and high ash pellets cost less than premium pellets and can be cost effective when burned in the Accentra.

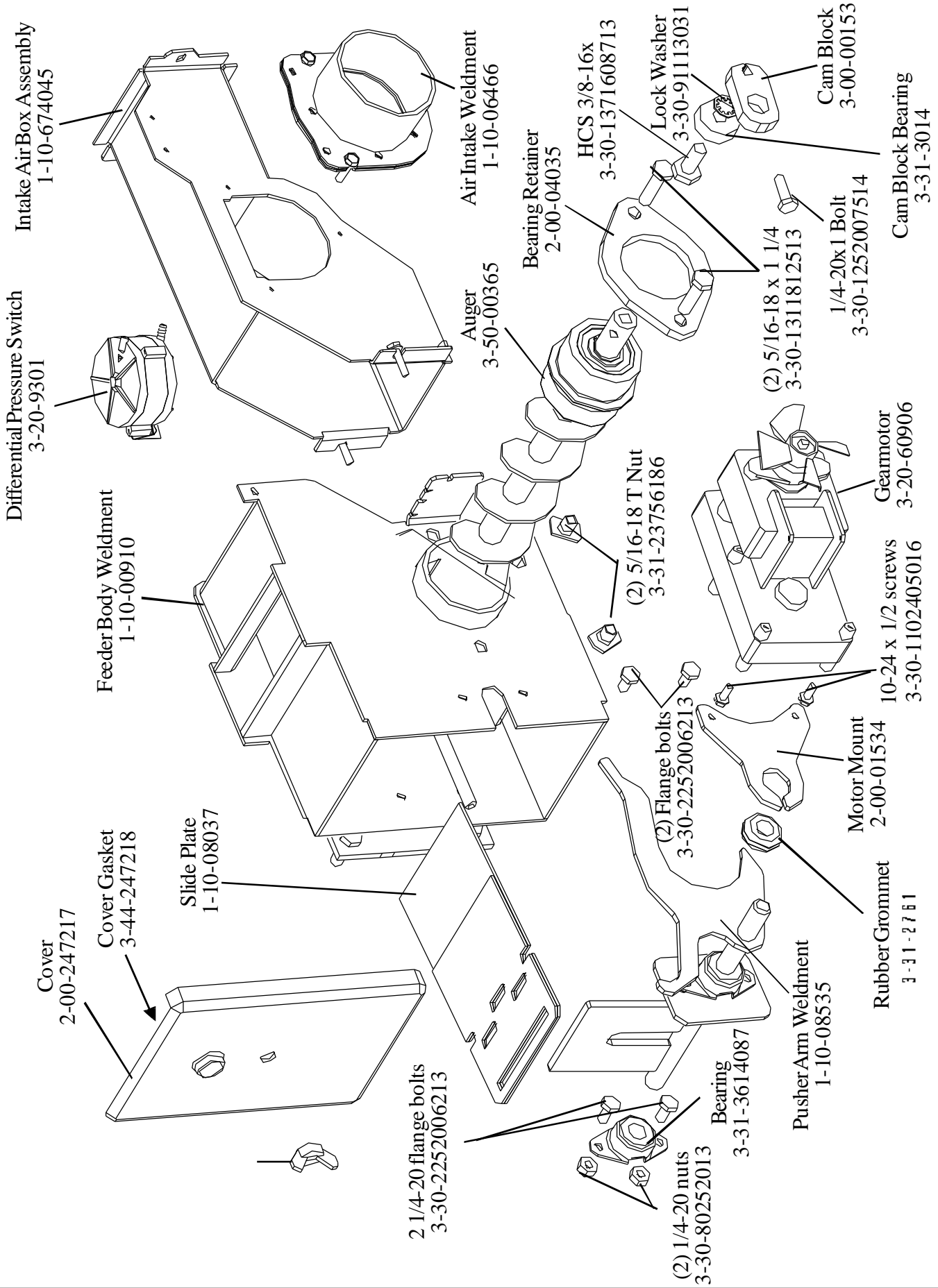
The moisture content must not exceed 8%. Higher moisture will rob BTU's and may not burn properly.

Unit # 1-90-00674 Hopper capacity 57 lbs.- 25.85 kg
 Unit # 1-90-00675 Hopper capacity 48 lbs.- 21.75 kg
 Unit # 1-90-00676 Hopper capacity 38 lbs.- 17.25 kg



Weight	450 lbs.
Blower	180 cfm
Hopper Capacity	57 lbs. (24" hopper #1-90-00674)
Fuel	Wood Pellets
Outside Air Size	3 inches
Fuse Rating	6 amp
BTU Range	0 to 42,000
Feed Rate	.75 lbs./hr. on minimum(on maintenance) 5 lbs./ hr. on maximum
Vent Size	4 inch Pellet Vent Pipe, standard, 3 inch Pellet Vent Pipe, option
Maximum Wattage	440 Watts (Start cycle and test)
Start Cycle Wattage	340 Watts
Normal Run Wattage	255 Watts





<u>Description</u>	<u>Part Number</u>
Hopper Lid Gasket (5.25',1/2 x 3/8" silicone w/PSA)	3-44-375501
Ignitor Element Assembly	1-10-06620
Wiring Harness	3-20-08727
Burn Pot Weldment	1-10-00675
Heat Exchanger Cover (2)	3-00-674050
Center Medallion (1)	3-00-674060
Arrow Scraper	2-00-773850
Flame Guide	3-00-674069
Gear Motor	3-20-60906
Thermister Probe	3-20-00744
Room Sensor	3-20-00906
Circuit Board G5237	3-20-05237
2 5/8" Black CCW Fan Blade(auger motor)	3-20-2046399
Differential Switch	3-20-9301
4 3/4" Single Paddle Combustion Fan Blade	3-21-00661
Combustion Blower	3-21-08639
Distribution Blower	3-21-47120
Tailpipe Insulator	3-44-674102
White/Black Control Knob (3)	3-31-00968
Control Knob Shaft (3)	3-31-00982
Front Glass w/gasket	3-40-674090
Docking Gasket (red silicone)	3-44-06108
Wood Handle	3-40-00123
Wiring Diagram	3-90-09321
Control Panel Sticker	3-90-06655
Owner's Manual	3-90-00674
Hopper Lid Label	3-90-08416
Ash Pan Assembly	1-10-674030
Cast Hopper Lid	3-00-674059
Ball Spring Plunger (3)	3-31-5500
Glass Clips (4)	2-00-249140
Power Cord	3-20-674200
Flue Brush	3-40-00126
3/8" Black Door Gasket (5 1/2 ft.)	3-44-37525
<u>Options:</u> Outside Air Assembly	1-10-674080
Log Kit	1-00-674099
Zero Clearance Cabinet	1-10-674070
Zero Clearance Box Flue Pipe Support	1-00-674119
4" PL vent stub	1-00-674040
3" PL vent stub	1-00-674039

HARMAN GOLD WARRANTY **6 YEAR TRANSFERABLE LIMITED** **WARRANTY (Residential)** **1 YEAR LIMITED WARRANTY (Commercial)**



Harman Stove Company warrants its products to be free from defects in material or workmanship, in normal use and service, for a period of 6 years from the date of sales invoice and for mechanical and electrical failures, in normal use and service, for a period of 3 years from the date of sales invoice.

If defective in material or workmanship, during the warranty period, Harman Stove Company will, at its option, repair or replace the product as described below.

The warranty above constitutes the entire warranty with respect to Harman Stove Company products. HARMAN STOVE COMPANY MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING "ANY" WARRANTY OF MERCHANTABILITY, OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. No employee, agent, dealer, or other person is authorized to give any warranty on behalf of Harman Stove Company. This warranty does not apply if the product has been altered in any way after leaving the factory. Harman Stove Company and its agents assume no liability for "resultant damages of any kind" arising from the use of its products. In addition, the manufacturer and its warranty administrator shall be held free and harmless from liability from damage to property related to the operation, proper or improper, of the equipment.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

THESE WARRANTIES APPLY only if the device is installed and operated as recommended in the user's manual.

THESE WARRANTIES WILL NOT APPLY if abuse, accident, improper installation, negligence, or use beyond rated capacity causes damage.

HOW TO MAKE A CLAIM - Any claim under this warranty should be made to the dealer from whom this appliance was purchased. Then contact is made with manufacturer, giving the model and serial numbers, the date of purchase, your dealer's name and address, plus a simple explanation of the nature of the defect. Extra costs such as mileage and overtime are not covered. Nuisance calls are not covered by these warranties.

THIS WARRANTY IS LIMITED TO DEFECTIVE PARTS - REPAIR AND/OR REPLACEMENT AT HARMAN STOVE COMPANY'S OPTION AND EXCLUDES ANY INCIDENTAL AND CONSEQUENTIAL DAMAGES CONNECTED THEREWITH.

WARRANTY EXCLUSIONS: Failure due, but not limited to, fire, lightning, acts of God, power failures and/or surges, rust, corrosion and venting problems are not covered. Damage and/or repairs including but not limited to; remote controls, filters, fuses, knobs, glass, ceramic brick panels, ceramic fiber afterburners, door packing, tile, ceramic log sets, paint, batteries or battery back-up and related duct work are not covered. Also excluded from this warranty are consumable or normal wear items including but not limited to; flame guides, grates, coal bars, afterburner hoods, fire brick, gaskets. Additional exclusions for corn stoves are burnpot housing weldment, burnpot grate weldment (pellet or corn), burnpot front plate (pellet or corn), burnpot front plate lock, corn auger extension, ceramic insert, and ceramic insert plate. Additional or unusual utility bills incurred due to any malfunction or defect in equipment and the labor cost of gaining access to or removal of a unit that requires special tools or equipment are not covered. Maintenance needed to keep the stove in "good operating condition" is not covered. This includes, but is not limited to, cleaning, adjustment of customer controls and customer education. Labor, materials, expenses and/or equipment needed to comply with law and/or regulations set forth by any governmental agencies are not covered.

This Warranty provides specific legal rights and the consumer may have other rights that vary from state to state.

In the event of change in ownership, the remaining portion of this warranty may be transferred to the new owner by sending the new owner information to the Harman Stove Company.

PLEASE READ THE LITERATURE BY THE MANUFACTURER FOR THE VARIOUS ACCESSORY DEVICES. THE MANUFACTURER WARRANTS THESE ACCESSORY DEVICES, NOT HARMAN STOVE COMPANY OR THEIR WARRANTY ADMINISTRATOR. FURTHERMORE, THESE ACCESSORY DEVICES MUST BE INSTALLED AND USED ACCORDING TO THE RECOMMENDATIONS OF THE MANUFACTURER.

REMEDIES - The remedies set forth herein are exclusive and the liability of seller with respect to any contract or sale or anything done in connection therewith, whether in Contract, in tort, under any warranty, or otherwise, shall not, except as herein expressly provided, exceed the price of the equipment or part of which such liability is based.

CLARIFY - The above represents the complete warranty, which is given in connection with stoves, manufactured by Harman Stove Company. No other commitments, verbal or otherwise, shall apply except by a written addendum to this warranty.